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(FILE 'HOME' ENTERED AT 08:59:43 ON 11 MAY 2003)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 09:00:00 ON 11 MAY 2003

E GLYCYRRHIZIC ACID/CN

L1 1 S E3
E GLYCYRRHIZIN/CN
L2 1 S E3
E GLYCYRRHETINIC ACID/CN
L3 1 S E3
L4 2 S L1-L3
SEL RN
L5 243 S E1-E2/CRN
L6 66 S L5 NOT ((PMS OR IDS OR MNS OR MXS)/CI OR COMPD OR WITH OR UNS
L7 65 S L6 NOT COLCHI?
L8 1 S INULIN/CN
E CETYL PYRIDINIUM CHLORIDE/CN
L9 1 S E3
E ZINC/CN
L10 1 S E3
E ZINC CHLORIDE/CN
L11 1 S E3
L12 32 S ZN/MF AND ION NOT ISOTOPE
E COPPER GLUCONATE/CN
L13 1 S E3
L14 10 S 526-95-4/CRN AND CU/ELS
L15 1 S L14 AND H2O
L16 1 S L14 AND ZN/ELS
L17 1 S L14 AND NC5/ES
L18 32 S CU/MF AND ION NOT ISOTOPE

FILE 'HCAPLUS' ENTERED AT 09:08:11 ON 11 MAY 2003

E SUNSTAR/PA,CS

L19 1403 S E3-E69
L20 1312 S L19 AND P/DT
L21 586 S L20 AND COSMETIC#/SC, SX
L22 274 S L20 AND (PHARMACEUT? OR PHARMACOL?) /SC, SX
L23 744 S L21, L22
L24 99 S L23 AND 1996/PY, PRY, AY
E JP408151324/PN
L25 109 S L23 AND 1992/PY, PRY, AY
L26 80 S L23 AND 1999/PY, PRY, AY
L27 261 S L24-L26
L28 16 S L27 AND (LICORI? OR LIQUOR? OR ?GLYCYR? OR ?GLABRIDIN? OR ?GL
SEL DN AN 7 8 14
L29 3 S L28 AND E1-E9

FILE 'REGISTRY' ENTERED AT 09:15:57 ON 11 MAY 2003

E GLABRIDINE/CN

E GLABRIDIN/CN

L30 1 S E3
L31 8 S E6-E15
L32 1 S C20H20O4/MF AND (2404.191.11 AND 46.150.18) /RID AND 4/NR
L33 1 S L30, L32
SEL RN
L34 5 S E1/CRN
L35 5 S L31 AND (SQL/FA OR UNSPECIFIED)
L36 3 S L31 NOT L35

FILE 'HCAPLUS' ENTERED AT 09:19:28 ON 11 MAY 2003

L37 3296 S L4 OR L7 OR L33

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

L38 207 S L31
 E LICORICE/CT

L39 2055 S E3-E27

L40 423 S E29-E66
 E E68+ALL

L41 242 S E2
 E LICORICE/CT
 E E3+ALL

L42 1197 S E1
 E E2+ALL

L43 1282 S E7+NT
 E GLYCYRRHIZA/CT
 E E12+ALL

L44 209 S E2

L45 543 S E1/BI
 E E2+ALL

L46 419 S E9,E8+NT
 E E7+ALL

L47 1282 S E7+NT

L48 3421 S E8-E10/BI

L49 6061 S L37-L48

L50 627 S (GLYCYRRHIZ? OR G) () GLABRA

L51 2739 S GLYCYRRH? ACID

L52 2215 S GLYCYRRHIZIN? OR GLABRIDIN? OR GLABRIN?

L53 7055 S L37-L52

L54 15 S L53 AND (L8 OR INULIN)

L55 305 S L53 AND ?SACCHARIDE?
 E POLYSACCHARIDES/CT
 E E3+ALL

L56 641 S L53 AND E4,E5,E3+NT
 E OLIGOSACCHARIDES/CT
 E E3+ALL

L57 2155 S L53 AND E4,E5,E3+NT

L58 54 S L53 AND (L9 OR CPC OR (CETYL PYRIDINIUM OR CETYL PYRIDINIUM) ())
 0 S L53 AND L16,L17

L60 115 S L53 AND (L10 OR L11 OR L12)

L61 33 S L53 AND (ZNCL2 OR (ZINC OR ZN) () CHLORIDE OR (ZN OR ZINC) () SAL

L62 261 S L53 AND (ZN OR ZINC)

L63 2 S L53 AND (L13 OR L15 OR L18)

L64 133 S L53 AND (CU OR COPPER OR CUPR? OR (CU OR COPPER) () GLUCONATE)

L65 347 S L53 AND (DENTIFRICE OR TOOTHPASTE OR TOOTH PASTE OR MOUTHWASH)

L66 141 S L53 AND (?PLAQUE? OR TARTAR OR ANTITARTAR OR ?CALCULUS? OR ?C

L67 192 S L65,L66 AND L54-L64

L68 101 S L67 AND 62/SC,SX

L69 112 S L67 AND (1 OR 63)/SC,SX

L70 166 S L68,L69

L71 26 S L67 NOT L70
 SEL DN AN 15 17 19 20 21

L72 5 S E1-E15 AND L71

L73 165 S L70 AND (PD<=20011102 OR PRD<=20011102 OR AD<=20011102)

L74 58 S L53 AND (?GINGIV? OR ?PERIODONT? OR ?PERIDONT? OR ?PERODONT?)

L75 24 S L74 AND L54-L64

L76 34 S L74 NOT L75
 SEL DN AN 6 8 19 24 25

L77 29 S L76 NOT E16-E30

L78 52 S L75,L77 AND (PD<=20011102 OR PRD<=20011102 OR AD<=20011102)

L79 84 S L73 NOT (DENTIFRICE# OR MOUTHWASH?)/CW
 SEL DN AN 16 43 53 54 72 75 76 80 82

L80 9 S L79 AND E31-E57

L81 67 S L73 NOT L74-L80

L82 64 S L81 NOT STATUS/TI

L83 19 S L82 AND (SALTS OR SWEET BASE OR GELLAN OR WATER OR MOUTH CAVI

L84 88 S L29,L72,L78,L80,L83

L85 88 S L84 AND L19-L29,L37-L84
 E RUGGLES N/AU
 E RUGGLES/AU
L86 25 S E3,E31-E38
L87 0 S L86 AND L19-L29,L37-L85
 E INOBYS/PA,CS
L88 4 S (L8 OR INULIN) AND (L9 OR CPC OR (CETYLPYRIDINIUM OR CETYL PY
L89 92 S L85,L88
L90 42 S L53 AND OIL(2A)SOLUB?
L91 66 S L53 AND (WATER OR H2O) (2A)INSOLUB?
L92 105 S L90,L91
L93 60 S L92 AND EXTRACT?
 SEL DN AN 1 14-16 20 21 25 26 45 47
L94 10 S L93 AND E1-E30
L95 100 S L89,L94
L96 43 S L92 NOT L93-L95
 SEL DN AN 2 4 5 12 14 17 22 23 24 30 31 33 34 39
L97 14 S L96 AND E31-E72
L98 114 S L95,L97 AND L19-L29,L37-L97
 SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:20:51 ON 11 MAY 2003
L99 64 S E73-E136

FILE 'HCAPLUS' ENTERED AT 10:21:19 ON 11 MAY 2003
 SET SMARTSELECT ON
L100 SEL L98 1- RN : 685 TERMS
 SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 10:21:20 ON 11 MAY 2003
L101 684 S L100
L102 9 S L101 AND ZN/ELS
L103 1 S L101 AND CU/ELS

FILE 'HCAPLUS' ENTERED AT 10:21:43 ON 11 MAY 2003
L104 80 S L102,L103,L99 AND L98
L105 114 S L98,L104

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 10:22:14 ON 11 MAY 2003
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FILE COVERS 1907 - 11 May 2003 VOL 138 ISS 20
FILE LAST UPDATED: 9 May 2003 (20030509/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L105 ANSWER 1 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2003:298935 HCAPLUS

DN 138:308990

TI Liquid dentifrices containing foaming agents

IN Toushima, Kiyoko

PA Kobayashi Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-24

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003113061	A2	20030418	JP 2001-338590	20010929 <--
PRAI	JP 2001-338590		20010929 <--		

AB Disclosed are 2-component liq. dentifrices comprising (1) a first soln. contg. sodium dihydrogen pyrophosphate and/or **cetylpyridinium chloride**; and citric acid and/or sodium citrate and (2) a second soln. contg. alkali metal carbonates and alkali metal bicarbonates. Disclosed are 2-component liq. dentifrices comprising (1) a first soln. contg. citric acid and/or sodium citrate and (2) a second soln. contg. dipotassium **glycyrrhizinate**, alkali metal carbonates, and alkali metal bicarbonates. Disclosed are 2-component liq. dentifrices comprising (1) a first soln. contg. sodium polyphosphate and/or trisodium phosphate; and citric acid and/or sodium citrate and (2) a second soln. contg. alkali metal carbonates and alkali metal bicarbonates. Disclosed are 2-component liq. dentifrices comprising (1) a first soln. contg. citric acid and/or sodium citrate and (2) a second soln. contg. allantoin, **glycyrrhizinic acid**, and/or sodium pyrophosphate; and alkali metal carbonates and alkali metal bicarbonates. When the two solns. are mixed prior to use, foams are generated. The products can be safely stored for a long time without pptn. or color change.

ST antiplaque mouthwash citrate carbonate bactericide

antiinflammatory

IT Polyphosphoric acids

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(sodium salts; two-component mouthwashes contg. active ingredients and foaming agents)

IT Mouthwashes

(two-component mouthwashes contg. active ingredients and foaming agents)

IT Bicarbonates

Carbonates, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(two-component mouthwashes contg. active ingredients and foaming agents)

IT 68-04-2, Sodium citrate 77-92-9, Citric acid, biological studies

97-59-6, Allantoin 123-03-5, **Cetylpyridinium**

chloride 144-55-8, Sodium hydrogen carbonate, biological studies .

497-19-8, Sodium carbonate, biological studies 1405-86-3,

Glycyrrhizinic acid 7558-79-4, Sodium monohydrogen phosphate 7601-54-9, Trisodium phosphate 7722-88-5, Sodium pyrophosphate 7758-16-9 **68797-35-3**, Dipotassium **glycyrrhizinate**

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(two-component mouthwashes contg. active ingredients and foaming agents)

IT 123-03-5, **Cetylpyridinium chloride**

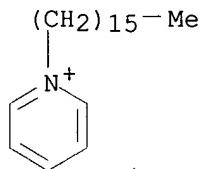
1405-86-3, **Glycyrrhizinic acid**

68797-35-3, Dipotassium glycyrrhizinate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(two-component mouthwashes contg. active ingredients and foaming agents)

RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)

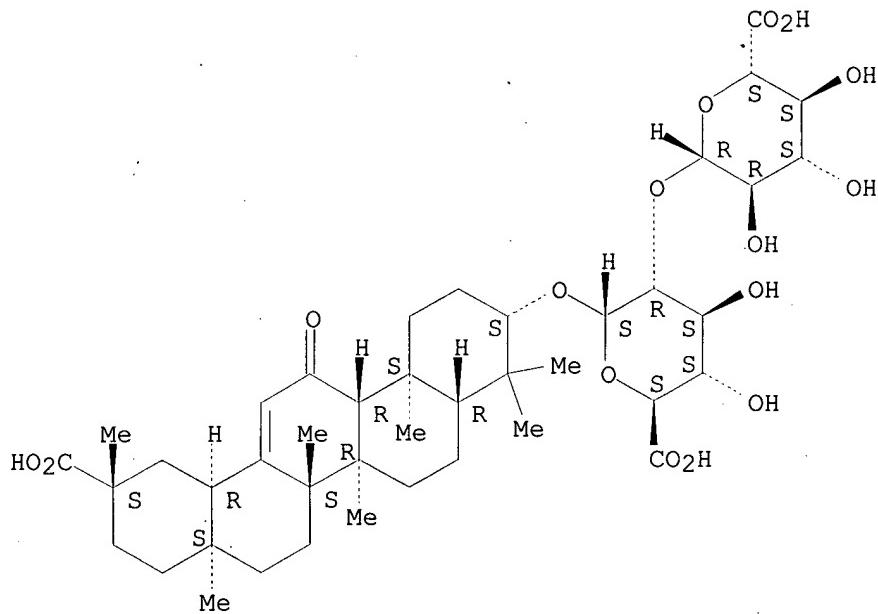


● Cl⁻

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

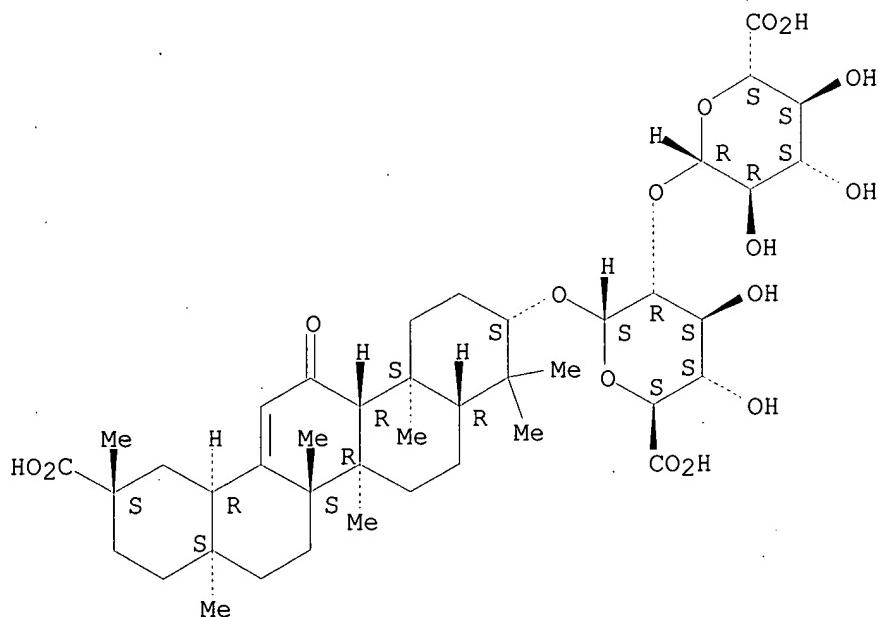


RN 68797-35-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

L105 ANSWER 2 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2003:216875 HCAPLUS

DN 138:242908

TI **Dentifrices containing anti-inflammatory agents**

IN Akabane, Yasuhiro; Fukazawa, Akira; Ide, Yasuhiko; Yamamoto, Takashi

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICS A61K031-195; A61K031-197; A61P001-02; A61P029-00; A61P043-00

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003081799	A2	20030319	JP 2002-179555	20020620 <--

PRAI JP 2001-194012 A 20010627 <--

AB The invention **dentifrices** comprise (1) silica abrasive, (2) Na lauryl sulfate .gtoreq. 1.6 %, (3) Na polyacrylate 0.7-1 %, (4) xanthan gum 0.4-0.6 %, and (5) anti-inflammatory agents, such as antiplasmin. The **dentifrices** provide a firm shape on the toothbrush and the anti-inflammatory agents are well dispersed in the buccal cavity. For example, a **toothpaste** contained silica abrasive 20, silica thickener 4, Na polyacrylate 0.9, xanthan gum 0.45, sorbitol 40, Na lauryl sulfate 3, saccharin Na 0.2, propylene glycol 4, methylparaben 0.06, butylparaben 0.01, titania 0.3, flavors 1, tranexamic acid 0.05, NaF 0.21,

water balance to 100 %.

ST dentifrice antiinflammatory polyacrylate xanthan gum
 IT Anti-inflammatory agents

Dentifrices

(dentifrices contg. anti-inflammatory agents)

IT 60-32-2, .epsilon.-Aminocaproic acid 151-21-3, Sodium lauryl sulfate, biological studies 1197-18-8, Tranexamic acid 7631-86-9, Silica, biological studies 9003-04-7, Sodium polyacrylate 9049-68-7, Antiplasmin 11138-66-2, Xanthan gum 68797-35-3,

Dipotassium glycyrrhizinate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(dentifrices contg. anti-inflammatory agents)

IT 11138-66-2, Xanthan gum 68797-35-3, Dipotassium glycyrrhizinate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(dentifrices contg. anti-inflammatory agents)

RN 11138-66-2 HCAPLUS

CN Xanthan gum (9CI) (CA INDEX NAME)

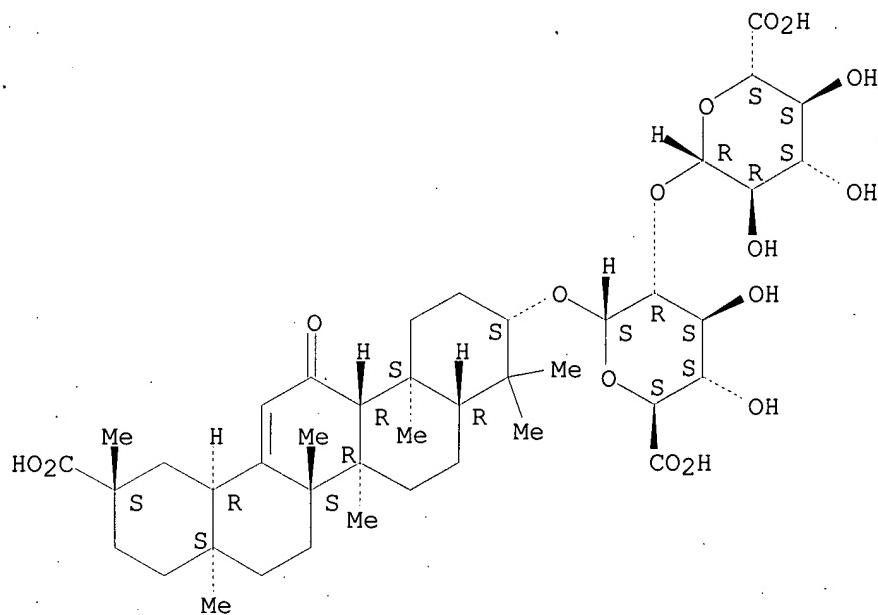
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 68797-35-3 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

2 K

DN 138:209963
 TI Nonirritant storage-stable topical preparations containing vitamin C derivatives and oil-soluble extracts of **Glycyrrhiza glabra**
 IN Mori, Toshiharu; Kono, Masato
 PA Nikko Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-00
 ICS A61K007-00; A61K007-48; A61K031-375; A61K035-78; A61K047-06;
 A61K047-14; A61K047-32; A61P017-16
 CC 62-4 (Essential Oils and Cosmetics)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003073219	A2	20030312	JP 2001-260572	20010830
PRAI JP 2001-260572		20010830		

AB The preps. contain (A) vitamin C derivs. 0.01-10.0, (B) oil-sol. exts. of **Glycyrrhiza glabra** 0.001-0.30, (C) acrylamide-Na acryldimethyltaurate copolymer (I) 0.10-5.0, and (D) polyoxyethylene sorbitan monooleate (20 ethylene oxide units) (II) and/or sorbitan monooleate (III) 0.01-1.0 wt.%. A cosmetic lotion contg. H₂O 51.52, citric acid 0.01, Na citrate 0.70, trisodium EDTA 0.10, glycerin 5.00, Na L-ascorbyl phosphate 5.00, an aq. soln. contg. 2% xanthan gum 30.00, **G. glabra** oil-sol. ext. powder 0.15, EtOH 5.00, Simulgel 600 (mixt. contg. I, II, and III) 1.50, an aq. soln contg. 1% Na hyaluronate 0.01, comfrey ext. 0.01, and yeast ext. 1.00 wt.% showed no sepn. after 1-mo storage at 50.degree. and showed good skin-lightening effect.

ST vitamin C **Glycyrrhiza** skin lightening topical; acrylamide acryldimethyltaurate copolymer vitamin C cosmetic; polyoxyethylene sorbitan oleate cosmetic ascorbyl phosphate

IT Human
 (nonirritant storage-stable skin-lightening cosmetics contg. vitamin C derivs. and **Glycyrrhiza glabra** oil-sol. exts.)

IT Licorice (**Glycyrrhiza glabra**)
 (oil-sol. exts.; nonirritant storage-stable skin-lightening cosmetics contg. vitamin C derivs. and **Glycyrrhiza glabra** oil-sol. exts.)

IT Cosmetics
 (skin-lightening; nonirritant storage-stable skin-lightening cosmetics contg. vitamin C derivs. and **Glycyrrhiza glabra** oil-sol. exts.)

IT 1338-43-8, Sorbitan monooleate 9005-64-5, Polyoxyethylene sorbitan monolaurate 38193-60-1, Simulgel 600
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (in nonirritant storage-stable skin-lightening cosmetics contg. vitamin C derivs. and **Glycyrrhiza glabra** oil-sol. exts.)

IT 50-81-7D, Vitamin C, derivs. 128808-26-4, Sodium ascorbyl phosphate
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (nonirritant storage-stable skin-lightening cosmetics contg. vitamin C derivs. and **Glycyrrhiza glabra** oil-sol. exts.)

IN Dana, Frederic
 PA Fr.
 SO U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 872,829,
 abandoned.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A61K007-16
 NCL 424049000
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 1, 63
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003003059	A1	20030102	US 2001-4111	20011115 <--
	FR 2822700	A1	20021004	FR 2001-4614	20010403 <--
PRAI	FR 2001-4614	A	20010403 <--		
	US 2001-872829	B2	20010601 <--		

AB The present invention relates to **oral care** compns. which provide a means to deliver actives useful in the prevention, treatment and/or management of dental and related tissue conditions, including dental **caries**, dental cavities, microbial flora, **tartar**, **periodontal** and related gum disease. In addn., the present invention may be used in the healthy maintenance of **teeth** and gums of humans and pets. The present compns. are useful to whiten **teeth** and otherwise favorably impact the cosmetic appeal of the **teeth** and gums of a subject or patient. The inclusion of effective amts. of colostrum in **dental care** compns. provides an unexpectedly high efficacy of such formulations in inhibiting, reducing or otherwise preventing microbial growth, dental **caries**, **plaque**, cavities and gum disease, including **periodontal** disease. The use of colostrum with other enzymes, e.g., lysozyme, lactoperoxidase, dextranase, mutanase, cellulase, amyloglucosidase, papain, bromelin, lactoferrin, etc., represents a particularly preferred embodiment for use in the present invention because of the unexpected antimicrobial activity exhibited by the enzyme combination. For example, chewable **dentifrice** tablets were prep'd. contg. (by wt.) bromochlorophene 0.01-1%, enoxolone 0.1-3%, sodium bicarbonate 1-5%, silica 1-5%, sorbitol 45-60%, xylitol 5-40%, liver powder 1-15%, methionine/cysteine 0.1-3%, Coloring 5 0.001-0.1%, papain/bromelin 0.01-1%, glucose oxidase/lactoperoxidase 0.01-1%, amyloglucosidase/invertase 0.01-1%, and lysozyme/lactoferrin 0.01-1%.

ST colostrum antimicrobial enzyme ingestible **dentifrice**

IT Aging, animal

(agents for reducing of; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)

IT Chlorophylls, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (anti-halitosis; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)

IT Witch hazel

(anti-inflammatory; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)

IT Dentifrices

(anticalculus; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)

IT Enzymes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (antimicrobial; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)

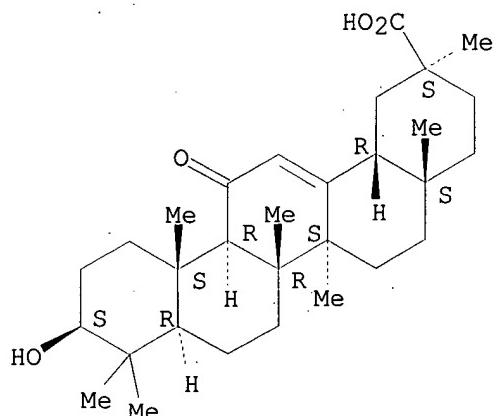
IT Dentifrices

(antiplaque; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)

- IT Nutrients
 - (cleaners; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT **Dentifrices**
 - (dental floss; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Bleaching agents
 - (dental; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT **Periodontium**
 - (disease, prevention and treatment of; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Essential oils
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 - (eucalyptus, anti-halitosis; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Ginkgo biloba
 - (exts., anti-inflammatory; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Lichen
 - (exts., protective for **tooth** enamel; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT **Dentifrices**
 - (gels; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Fats and Glyceridic oils, biological studies
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 - (grape seed, antiaging; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Mouth
 - (**halitosis**, agents for prevention and treatment of; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Anti-inflammatory agents
 - Antibacterial agents
 - Antimicrobial agents
 - Antioxidants
 - Colostrum
 - Gelation agents
 - Human
 - (ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Lactoferrins
 - Vitamins
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 - (ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Bone formation
 - (mineralization, agents for **tooth** enamel; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Essential oils
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 - (mint, Mentha, anti-halitosis; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Essential oils
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 - (parsley, anti-halitosis; ingestible **dentifrice** compns. contg. colostrum with other antimicrobial enzymes)
- IT Alcohols, biological studies
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 - (polyhydric; ingestible **dentifrice** compns. contg. colostrum

- with other antimicrobial enzymes)
- IT Phenols, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (polyphenols, nonpolymeric, antiaging; ingestible **dentifrice**
 compns. contg. colostrum with other antimicrobial enzymes)
- IT **Dentifrices**
 (tablets; ingestible **dentifrice** compns. contg. colostrum with
 other antimicrobial enzymes)
- IT 52-90-4, L-Cysteine, biological studies 63-68-3, L-Methionine,
 biological studies 70-18-8, L-Glutathione, biological studies
 616-91-1, N-Acetylcysteine
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (anti-**halitosis** agent; ingestible **dentifrice**
 compns. contg. colostrum with other antimicrobial enzymes)
- IT 69-72-7, Salicylic acid, biological studies 275-51-4, Azulene
471-53-4, Enoxolone
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (anti-inflammatory agent; ingestible **dentifrice** compns.
 contg. colostrum with other antimicrobial enzymes)
- IT 77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid,
 biological studies **546-46-3**, Zinc citrate
7646-85-7, Zinc chloride, biological studies
32594-06-2 75872-13-8 112084-16-9 479353-01-0
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (anti-**tartar** agent; ingestible **dentifrice** compns.
 contg. colostrum with other antimicrobial enzymes)
- IT 7440-70-2D, Calcium, compds.
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (antiaging; ingestible **dentifrice** compns. contg. colostrum
 with other antimicrobial enzymes)
- IT 55-56-1, Chlorohexidine 141-94-6, Hexetidine 3811-75-4, Hexamidine
 5304-59-6 15435-29-7, Bromochlorophene 92969-47-6 479353-00-9
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (antimicrobial agent; ingestible **dentifrice** compns. contg.
 colostrum with other antimicrobial enzymes)
- IT 56-03-1D, Biguanide, derivs.
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (antimicrobial agents; ingestible **dentifrice** compns. contg.
 colostrum with other antimicrobial enzymes)
- IT 9001-00-7, Bromelin 9001-37-0, Glucose oxidase 9001-57-4, Invertase
 9001-63-2, Lysozyme 9001-73-4, Papain 9003-99-0, Lactoperoxidase
 9012-54-8, Cellulase 9025-70-1, Dextranase 9031-30-5,
 Mucopolysaccharidase 9032-08-0, Amyloglucosidase 9075-84-7, Mutanase
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (ingestible **dentifrice** compns. contg. colostrum with other
 antimicrobial enzymes)
- IT 3380-34-5, Triclosan
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (protective agent for **tooth** enamel; ingestible
dentifrice compns. contg. colostrum with other antimicrobial
 enzymes)
- IT 1306-06-5, Calcium hydroxyapatite
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (**tooth** enamel mineralizer; ingestible **dentifrice**
 compns. contg. colostrum with other antimicrobial enzymes)
- IT **471-53-4**, Enoxolone
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (anti-inflammatory agent; ingestible **dentifrice** compns.
 contg. colostrum with other antimicrobial enzymes)
- RN 471-53-4 HCPLUS
- CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.

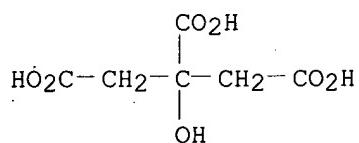


IT 546-46-3, Zinc citrate 7646-85-7, Zinc chloride, biological studies 32594-06-2

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(anti-tartar agent; ingestible dentifrice compns.
contg. colostrum with other antimicrobial enzymes)

RN 546-46-3 HCPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)



● 3/2 Zn

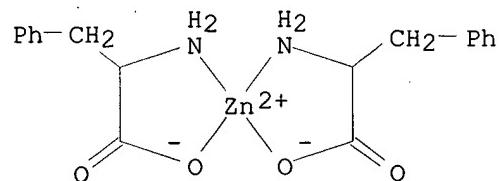
RN 7646-85-7 HCPLUS

CN Zinc chloride (ZnCl₂) (9CI) (CA INDEX NAME)

Cl-Zn-Cl

RN 32594-06-2 HCPLUS

CN Zinc, bis(L-phenylalaninato-.kappa.N,.kappa.O)-, (T-4)- (9CI) (CA INDEX NAME)



AN 2002:793444 HCAPLUS
 DN 137:284019
 TI Compositions containing lactic acid bacteria products for preventing
and/or treating oral diseases
 IN Ohta, Yukinori; Matsuyama, Eriko; Kokubo, Naomi; Sonobe, Toru
 PA Wakamoto Pharmaceutical Co., Ltd., Japan
 SO PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 IC ICM A61K035-74
 ICS A61K031-047; A61K031-7004; A61K031-7016; A61K031-702; A61K038-05;
A61K035-78; A61K007-26; A61K007-16; A61P001-02
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 17, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002080946	A1	20021017	WO 2002-JP3293	20020402 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	JP 2001-102752	A	20010402 <--		
	JP 2001-267943	A	20010904 <--		

AB Disclosed are compns. for preventing and/or treating oral diseases which
contain at least one member selected from among vital lactic acid
bacteria, materials contg. the lactic acid bacteria, culture filtrate of
the lactic acid bacteria and processed products thereof, together with at
least one member selected from among xylitol, sorbitol, erythritol,
trehalose, maltitol, mannitol, palatinose, reducing lactose, sucrose,
fructose, glucose, **fructooligosaccharide**, aspartame,
Acanthopanax senticosus ext., Houttuynia cordata ext., Monascus, turmeric
pigment, Chaenomeles sinensis ext., ganoderma ext., crataegus ext.,
shiitake mushroom ext., alpinia ext., stevia ext., lotus germ ext.,
Momordicae fructus ext., green tea ext., milk thistle ext., purple
unpolished rice ext., enzymically digested **licorice** root,
Engelhardtia chrysolepis Hance ext., ginkgo ext., rooibos tea ext.,
mugwort ext., **glycyrrhizin**, gymnema ext. and Rosa roxburghii
ext. A chewing gum contg. xylitol 9, mannitol 4, Lactobacillus
acidophilus 0.08, and gum base 7 g was prep'd.

ST Lactobacillus oral disease prevention; **dentifrice** chewing gum
Lactobacillus xylitol mannitol

IT Momordica
(Momordicae fructus exts.; compns. contg. lactic acid bacteria products
and other active components for preventing and/or treating oral
diseases)

IT Lotus (genus)
(berm exts.; compns. contg. lactic acid bacteria products and other
active components for preventing and/or treating oral diseases)

IT Tooth
(**caries**; compns. contg. lactic acid bacteria products and
other active components for preventing and/or treating oral diseases)

IT Dentifrices
(chewing gums; compns. contg. lactic acid bacteria products and other
active components for preventing and/or treating oral diseases)

IT Candy

- Chewing gum
 Chocolate
Dentifrices
Fusobacterium nucleatum
Haemophilus actinomycetemcomitans
Lactic acid bacteria
Lactobacillus
Lactobacillus acidophilus
Lactobacillus gasseri
Lactobacillus johnsonii
Lactobacillus rhamnosus
Lactobacillus salivarius
Monascus
Porphyromonas gingivalis
Prevotella intermedia
- Streptococcus mutans**
 (compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT **Fructooligosaccharides**
 RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);
 BIOL (Biological study); USES (Uses)
 (compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT Chewing gum.
 (dentifrices; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT Mouth
- Periodontium**
 (disease; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT *Silybum marianum*
 (ext., exts.; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT *Acanthopanax senticosus*
Alpinia
Artemisia
Aspalathus linearis
Engelhardtia chrysolepis
Ganoderma
Ginkgo
Gymnema
Hawthorn (Crataegus)
Houttuynia cordata
Lentinula edodes
Quince (Cydonia sinensis)
Rose (Rosa roxburghii)
Stevia
 (exts.; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT Tea products
 (green, exts.; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT *Curcuma longa*
 (pigments; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT Rice (*Oryza sativa*)
 (purple unpolished rice exts.; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)
- IT **Licorice (Glycyrrhiza)**
 (roots, enzymically digested; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating

oral diseases)

IT Drug delivery systems

(tablets, chewable; compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)

IT 50-70-4, Sorbitol, biological studies 50-99-7, Glucose, biological

studies 57-48-7, Fructose, biological studies 57-50-1,

Sucrose, biological studies 63-42-3D, Lactose, reduced

69-65-8, Mannitol 87-99-0, Xylitol 99-20-7, Trehalose

149-32-6, Erythritol 585-88-6, Maltitol 1405-86-3,

Glycyrrhizin 13718-94-0, Palatinose 22839-47-0,

Aspartame

RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);

BIOl (Biological study); USES (Uses)

(compns. contg. lactic acid bacteria products and other active components for preventing and/or treating oral diseases)

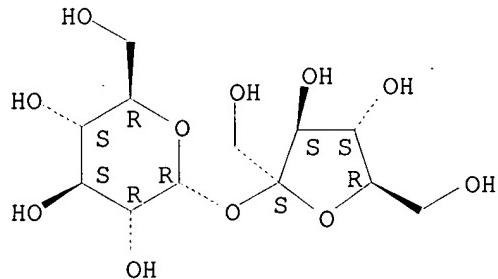
RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Centre National de La Recherche Scientifique; JP 08-508677 A 1995
- (2) Centre National de La Recherche Scientifique; ES 2130594 T3 1995 HCPLUS
- (3) Centre National de La Recherche Scientifique; CA 2159353 A 1995 HCPLUS
- (4) Centre National de La Recherche Scientifique; FR 2715582 A1 1995 HCPLUS
- (5) Centre National de La Recherche Scientifique; FR 2715582 B1 1995 HCPLUS
- (6) Centre National de La Recherche Scientifique; US 5780060 A 1995 HCPLUS
- (7) Centre National de La Recherche Scientifique; AU 690215 B2 1995 HCPLUS
- (8) Centre National de La Recherche Scientifique; EP 691886 A1 1995 HCPLUS
- (9) Centre National de La Recherche Scientifique; EP 691886 B1 1995 HCPLUS
- (10) Centre National de La Recherche Scientifique; AU 9516665 A1 1995 HCPLUS
- (11) Centre National de La Recherche Scientifique; WO 9521018 A1 1995 HCPLUS
- (12) F Hoffmann-La Roche & Co Ag; DE 2606533 A1 1976 HCPLUS
- (13) F Hoffmann-La Roche & Co Ag; IL 48997 A1 1976 HCPLUS
- (14) F Hoffmann-La Roche & Co Ag; JP 51-106741 A 1976 HCPLUS
- (15) F Hoffmann-La Roche & Co Ag; DK 7600697 A 1976 HCPLUS
- (16) F Hoffmann-La Roche & Co Ag; ZA 7600735 A 1976 HCPLUS
- (17) F Hoffmann-La Roche & Co Ag; NL 7601550 A 1976 HCPLUS
- (18) F Hoffmann-La Roche & Co Ag; SE 7601894 A 1976 HCPLUS
- (19) F Hoffmann-La Roche & Co Ag; AU 7610980 A1 1976 HCPLUS
- (20) F Hoffmann-La Roche & Co Ag; BE 838702 A1 1976 HCPLUS
- (21) Hada, S; Wakan Iyaku Gakkaishi 1989, V6(2), P100 HCPLUS
- (22) Hiji, Y; JP 02-33685 B 1990 HCPLUS
- (23) Hiji, Y; JP 03-78846 B 1990 HCPLUS
- (24) Hiji, Y; US 4912089 A 1990 HCPLUS
- (25) Hiji, Y; JP 63-119416 A 1990 HCPLUS
- (26) Hiji, Y; JP 63-208532 A 1990 HCPLUS
- (27) Ichimaru Pharcos Co Ltd; JP 200181021 A 2001
- (28) Ito En Ltd; JP 01-190624 A 1989
- (29) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; JP 04-52249 B 1985
- (30) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; CA 1262442 A 1985
- (31) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; EP 154549 A2 1985
- (32) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; EP 154549 B 1985
- (33) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; DE 3581091 G 1985
- (34) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; US 4746512 A 1985
- (35) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; JP 60-190707 A 1985
- (36) Kabushiki Kaisha Advance Kaihatsu Kenkyujo; JP 61-91126 A 1985
- (37) Kao Corp; JP 04-5222 A 1992
- (38) Lion Corp; JP 10-81617 A 1998 HCPLUS
- (39) Lion Corp; JP 2000154127 A 2000 HCPLUS
- (40) Maruzen Pharmaceuticals Co Ltd; JP 258105 A 1995
- (41) Maruzen Pharmaceuticals Co Ltd; JP 08-310931 A 1996 HCPLUS
- (42) Maruzen Pharmaceuticals Co Ltd; JP 10-139646 A 1998 HCPLUS
- (43) Maruzen Pharmaceuticals Co Ltd; JP 200072790 A 2000
- (44) Meiji Seika Kaisha Ltd; JP 09-200 A 1997 HCPLUS
- (45) Mitsubishi Petrochemical Co Ltd; JP 06-179780 A 1994 HCPLUS
- (46) Oh Jong Suk; EP 1002052 A1 1999 HCPLUS

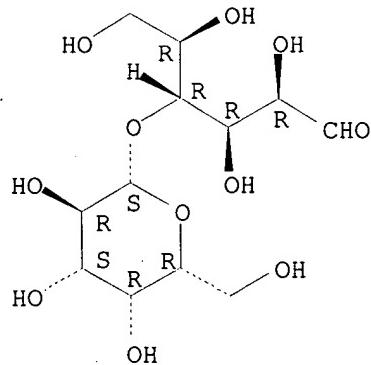
- (47) Oh Jong Suk; JP 2001512670 A 1999.
 (48) Oh Jong Suk; US 6036952 A 1999 HCPLUS
 (49) Oh Jong Suk; BR 9814737 A 1999 HCPLUS
 (50) Oh Jong Suk; AU 9881312 A1 1999 HCPLUS
 (51) Oh Jong Suk; WO 9907826 A1 1999 HCPLUS
 (52) Sakakura, S; Green tea polyphenols for prevention of dental caries, Chemistry and Applications of Green Tea 1997, P87
 (53) Sanyo-Kokusaku Pulp Co Ltd; JP 03-53848 A 1991 HCPLUS
 (54) Sunstar Inc; JP 11-243910 A 1999 HCPLUS
 (55) Sunstar Inc; WO 9944440 A1 1999 HCPLUS
 (56) Sunstar Inc; JP 2000270810 A 2000 HCPLUS
 (57) Sunstar Inc; EP 1072254 A1 2001 HCPLUS
 (58) Sunstar Inc; JP 11-302142 A 2001 HCPLUS
 (59) Sunstar Inc; CA 2330128 A 2001 HCPLUS
 (60) Sunstar Inc; WO 9955298 A1 2001 HCPLUS
 (61) The Procter & Gamble Co; GB 2317339 A1 1998 HCPLUS
 (62) Towa Kagaku Kogyo Kabushiki Kaisha; JP 09-238642 A 1997 HCPLUS
 IT 57-50-1, Sucrose, biological studies 63-42-3D, Lactose, reduced 99-20-7, Trehalose 1405-86-3,
Glycyrrhizin 13718-94-0, Palatinose
 RL: COS (Cosmetic use); FFD (Food or feed use); THU (Therapeutic use);
 BIOL (Biological study); USES (Uses)
 (compns. contg. lactic acid bacteria products and other active
 components for preventing and/or treating oral diseases)
 RN 57-50-1 HCPLUS
 CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



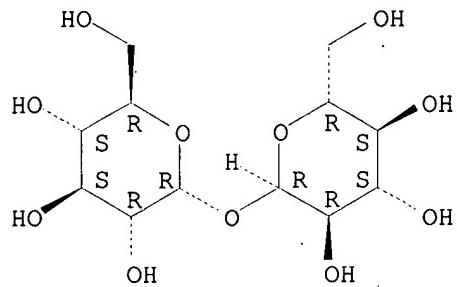
- RN 63-42-3 HCPLUS
 CN D-Glucose, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



- RN 99-20-7 HCPLUS
 CN .alpha.-D-Glucopyranoside, .alpha.-D-glucopyranosyl (9CI) (CA INDEX NAME)

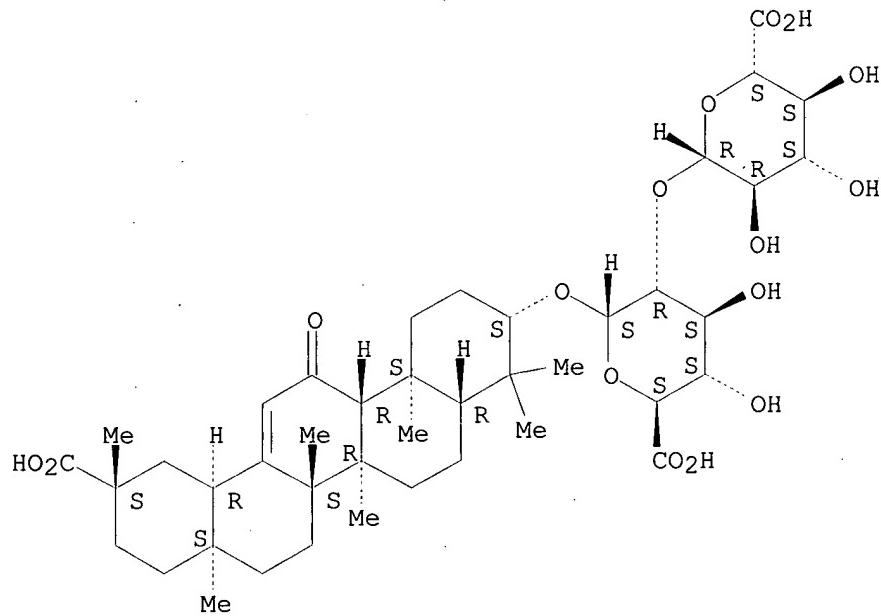
Absolute stereochemistry. Rotation (+).



RN 1405-86-3 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

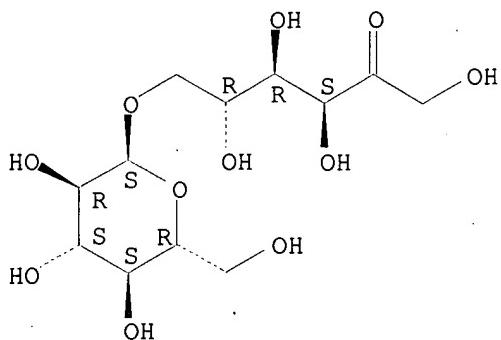
Absolute stereochemistry.



RN 13718-94-0 HCAPLUS

CN D-Fructose, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 6 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2002:688091 HCPLUS

DN 137:221814

TI Nonaqueous **dentifrice** compositions for stabilizing compounds which are unstable in the presence of **water**

IN Sugiyama, Shinji; Ejiri, Shigeyuki; Ishii, Yoshikazu

PA Nippon Zettoc Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICS A61K007-18; A61K007-28

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002255772	A2	20020911	JP 2001-56155	20010301 <--
PRAI JP 2001-56155		20010301 <--		

AB The title compns. comprise PVP (av. mol. wt. 10,000-360,000) and polyols selected from glycerin, diglycerin, propylene glycol, 1,3-butylene glycol, and polyethylene glycol. The compns. further comprise silica, .alpha.-tricalcium phosphate, fluorides, hinokitiol, and/or .alpha.-aminocaproic acid. A **toothpaste** contained PVP (av. mol. wt. 10,000) 5, concd. glycerin 49.45, silica 10, .alpha.-TCP 30, NaF 0.2, Na lauryl sulfate 1, ethoxylated hydrogenated castor oil 3, Na saccharin 0.1, paraben 0.1, flavor 1, tocopherol acetate 0.1, and **glycyrrhizinic acid** 0.05 %.

ST **dentifrice** PVP polyol fluoride calcium phosphate

IT **Dentifrices**

(nonaq. **dentifrice** compns. for stabilizing compds. which are unstable in the presence of water)

IT Enzymes, biological studies

Fluorides, biological studies

Polyoxyalkylenes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(nonaq. **dentifrice** compns. for stabilizing compds. which are unstable in the presence of water)

IT Alcohols, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(polyhydric; nonaq. **dentifrice** compns. for stabilizing compds. which are unstable in the presence of water)

IT 9004-34-6, Cellulose, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(cryst.; nonaq. **dentifrice** compns. for stabilizing compds. which are unstable in the presence of water)

IT 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol,

biological studies 60-32-2, .epsilon.-Aminocaproic acid 107-88-0, 1,3-Butylene glycol 499-44-5, Hinokitiol 7631-86-9, Silica, biological studies 7681-49-4, Sodium fluoride, biological studies 7758-87-4, .alpha.-Tricalcium phosphate 9003-39-8, PVP 25322-68-3, Polyethylene glycol 55128-73-9, Tin fluoride 59113-36-9, Diglycerin
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (nonaq. **dentifrice** compns. for stabilizing compds. which are unstable in the presence of water)

IT 9004-34-6, Cellulose, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (cryst.; nonaq. **dentifrice** compns. for stabilizing compds. which are unstable in the presence of water)

RN 9004-34-6 HCAPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 7 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:671827 HCAPLUS

DN 137:206549

TI Absorbable solid compositions for topical treatment of oral mucosal disorders

IN Domb, Avraham J.; Wolberman, Joseph Simcha

PA Efrat Biopolymers Ltd., Israel

SO Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K009-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1236466	A1	20020904	EP 2002-251320	20020226 <-- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2003003140 A1 20030102 US 2002-83413 20020227 <--
PRAI	US 2001-271735P	P	20010228 <--		

AB A solid, self-bioadhesive compn. is provided for topical application that adheres to the oral mucosal tissue comprising a therapeutically effective amt. of at least one herbal or homeopathic active agent and a pharmaceutically acceptable solid bioadhesive carrier in an amt. of about 40-99% based on the wt. of the whole compn. A herbal agent is selected from bioactive herb exts., tinctures and essential oils. The compn. further comprises a non-herbal active agent, e.g., analgesics, anti-inflammatory agents, antihistaminics, antiallergics, antimicrobial drugs, vitamins, enzymes, etc. For example, tablets were prep'd. by compression molding of herbal and non-herbal actives in powder form and mixts. of Carbopol 934 and HPMC. The formulation contained a herbal powder (an equal ratio of Echinacea, Calendula and golden seal exts.) 10 mg, vancomycin 1 mg, Carbopol 934 50 mg, and mint ext. 5 mg. The cap coating was composed of a mixt. of 5 mg of Mg-stearate and 5 mg Carbopol/HPMC (2:1 by wt.). The prepn. was used by patients exhibiting herpetic stomatitis lesions, aphthous ulcers, mucosal inflammation, toothache, RAS, and lesions on the lips, tang, and gingiva.

ST essential oil herbal ext tincture homeopathic prepn topical; oral mucosa bioadhesive solid essential oil herb homeopathic prepn

IT Essential oils

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Melaleuca; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Allergy inhibitors

Analgesics
Angelica
Anti-inflammatory agents
Antibacterial agents
Antibiotics
Antihistamines
Antimalarials
Antimicrobial agents
Antipyretics
Antiulcer agents
Antiviral agents
Baptisia
Calendula
Centella asiatica
Coneflower
Cytotoxic agents
Disinfectants
Echinacea
Elder (Sambucus)
Fungicides
Golden seal (*Hydrastis canadensis*)
Hawthorn (*Crataegus*)
Hemlock (*Tsuga*)
Human
Human herpesvirus
Licorice (Glycyrrhiza)
Mallow (*Malva*)
Matricaria
Parasiticides
Phytolacca
Plantago
Plasmid vectors
Propolis
Rhatany (*Krameria*)
Rosemary
Sage (*Salvia*)
Sage (*Salvia officinalis*)
St.-John's-wort (*Hypericum*)
Styrax
Taraxacum
Uncaria
(absorbable solid compns. for topical treatment of oral mucosal disorders)
IT Bile salts
Biopolymers
DNA
Enzymes, biological studies
Essential oils
Monoterpene
Natural products, pharmaceutical
Peptides, biological studies
Polyethers, biological studies
Polymers, biological studies
Polyoxyalkylenes, biological studies
Quaternary ammonium compounds, biological studies
Steroids, biological studies
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(absorbable solid compns. for topical treatment of oral mucosal disorders)
IT Mouth
(aphthous ulcer; absorbable solid compns. for topical treatment of oral mucosal disorders)

- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(basil, Ocimum basilicum; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Drug delivery systems
 - (bioadhesive; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cajuput; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Resins
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(catechu; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cedarwood; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cinnamon; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(citron; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(citronella; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(clove; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(eucalyptus; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fennel; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Honeysuckle (Lonicera)
 - (flower ext.; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Gardenia
 - (fruit ext.; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Grape
 - (fruit seed ext.; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(geranium; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Gingiva
 - (gingivitis; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Drug delivery systems
 - (homeopathic; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Mucous membrane

- (inflammation, oral; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Pruritus
(inhibitors; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(juniper, Juniperus communis berry; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lavender; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lemon; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Anesthetics
(local; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Embryophyta
(medicinal plant, exts.; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mint, Mentha; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Mouth
(mucosa, diseases; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Perfumes
(myrrh; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(myrtle; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Anti-inflammatory agents
(nonsteroidal; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(orange, sour; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(orange, sweet; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oregano; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Periodontium
(periodontitis; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pine; absorbable solid compns. for topical treatment of oral mucosal disorders)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pomelo peel; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Anemone
Gentian (Gentiana)
Kudzu (Pueraria)
Scutellaria
(root ext.; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rosemary; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sarriette; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(spearmint; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Mouth
(stomatitis; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Drug interactions
(synergistic; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Drug delivery systems
(tablets; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thyme, Thymus vulgaris; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Drug delivery systems
(tinctures; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT Drug delivery systems
(topical; absorbable solid compns. for topical treatment of oral mucosal disorders)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-36-2, Cocaine 55-56-1, Chlorhexidine 59-46-1, Procaine 60-54-8, Tetracycline 68-35-9, Sulfadiazine 73-40-5, Guanine 75-47-8, Iodoform 76-22-2, Camphor 76-57-3, Codeine 79-10-7D, Acrylic acid, esters, polymers 79-41-4D, Methacrylic acid, esters, polymers 85-79-0, Dibucaine 94-09-7, Benzocaine 94-24-6, Tetracaine 96-88-8, Mepivacaine 99-96-7D, p-Hydroxybenzoic acid, esters 108-95-2, Phenol, biological studies 124-94-7, Triamcinolone 133-16-4, Chloroprocaine 137-58-6, Lidocaine 138-86-3, Limonene 288-88-0, 1H-1,2,4-Triazole 586-60-7, Dyclonine 721-50-6, Prilocaine 738-70-5, Trimethoprim 1318-27-0, Carnallite 1397-89-3, Amphotericin B 1400-61-9, Nystatin 3380-34-5, Triclosan 6277-14-1, Acetoxolone 6809-52-5, Teprenone 7447-40-7, Potassium chloride, biological studies 7631-86-9, Silica, biological studies 7647-14-5, Sodium chloride, biological studies 7681-49-4, Sodium fluoride, biological studies 7789-48-2, Magnesium bromide 9000-30-0, Guar-gum 9000-69-5, Pectin 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic acid) 9004-32-4, Carboxymethyl cellulose sodium 9004-34-6D, Cellulose, derivs. 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9005-25-8D, Starch, derivs. 9007-16-3, Carbopol 934 9025-70-1, Dextranase 9036-66-2, Arabinogalactan 9057-02-7, Pullulan 13463-67-7, Titanium dioxide, biological studies 14807-96-6, Talc, biological studies 15687-27-1, Ibuprofen 22916-47-8, Miconazole 25322-68-3, Polyethylene

oxide 25655-41-8, Povidone-iodine 27254-80-4, Acridinamine
36637-18-0, Etidocaine 38396-39-3, Bupivacaine **54182-58-0**,
Sucralfate 59277-89-3, Acyclovir 73590-58-6, Omeprazole 76050-42-5,
Carbopol 940 82419-36-1, Ofloxacin 84625-61-6, Itraconazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(absorbable solid compns. for topical treatment of oral mucosal
disorders)
IT 9003-53-6, Polystyrene
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(beads; absorbable solid compns. for topical treatment of oral mucosal
disorders)
IT 6710-59-4, Barberine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(from Hydrastis canadensis; absorbable solid compns. for topical
treatment of oral mucosal disorders)
IT 9001-12-1, Collagenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; absorbable solid compns. for topical treatment of oral
mucosal disorders)
IT **9004-34-6**, Cellulose, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microcryst.; absorbable solid compns. for topical treatment of oral
mucosal disorders)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ginsol; WO 0170184 A 2001 HCPLUS
- (2) Lts Lohman Therapie-Systeme; EP 0355536 A 1990 HCPLUS
- (3) Montefarmaco; EP 0839524 A 1998 HCPLUS
- (4) Warner-Lambert; EP 0306454 A 1989 HCPLUS
- (5) Warner-Lambert; EP 0449782 A 1991
- (6) Warner-Lambert; WO 0018365 A 2000 HCPLUS

IT **9000-30-0**, Guar-gum **9000-69-5**, Pectin **9004-32-4**
, Carboxymethyl cellulose sodium **9004-34-6D**, Cellulose, derivs.
9004-54-0, Dextran, biological studies **9004-61-9**,
Hyaluronic acid **9004-62-0**, Hydroxyethyl cellulose
9004-64-2, Hydroxypropyl cellulose **9004-65-3**,
Hydroxypropyl methyl cellulose **9005-25-8D**, Starch, derivs.
9036-66-2, Arabinogalactan **9057-02-7**, Pullulan
54182-58-0, Sucralfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(absorbable solid compns. for topical treatment of oral mucosal
disorders)

RN 9000-30-0 HCPLUS

CN Guar gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9000-69-5 HCPLUS

CN Pectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-32-4 HCPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

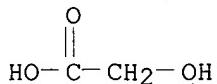
CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
 CMF C2 H4 O3



RN 9004-34-6 HCPLUS
 CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-54-0 HCPLUS
 CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-61-9 HCPLUS
 CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-62-0 HCPLUS
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

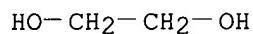
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
 CMF C2 H6 O2



RN 9004-64-2 HCPLUS
 CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

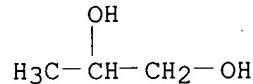
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-65-3 HCPLUS
 CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

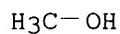
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

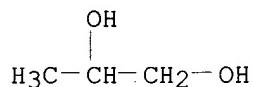
CM 2

CRN 67-56-1
 CMF C H4 O



CM 3

CRN 57-55-6
 CMF C3 H8 O2



RN 9005-25-8 HCPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9036-66-2 HCPLUS
 CN D-Galacto-L-arabinan (9CI) (CA INDEX NAME)

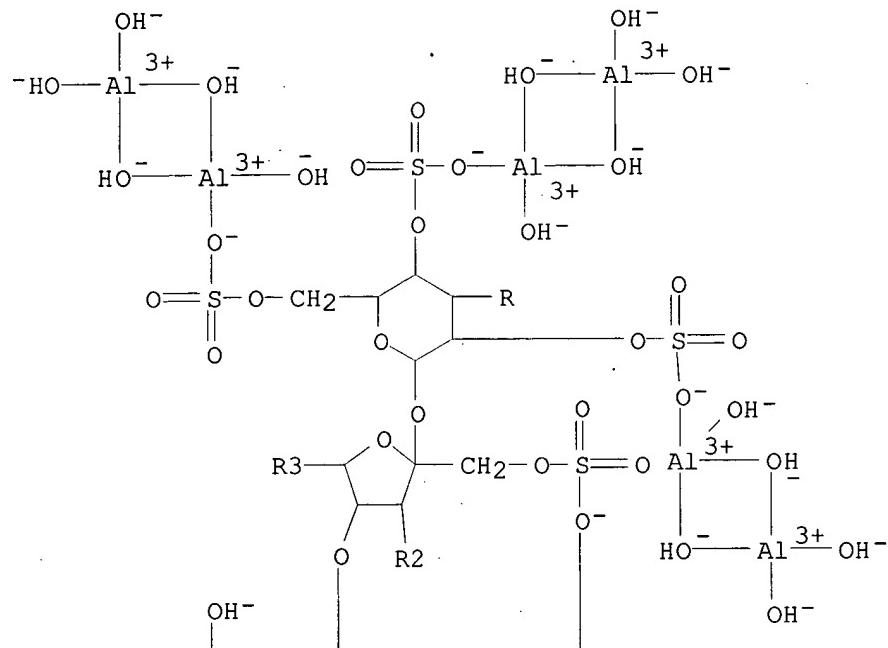
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9057-02-7 HCPLUS
 CN Pullulan (9CI) (CA INDEX NAME)

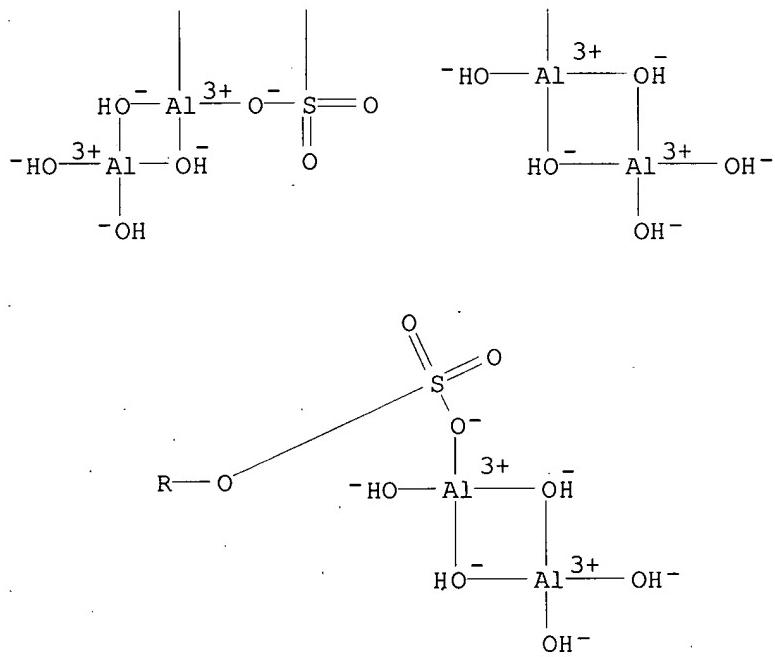
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 54182-58-0 HCPLUS
 CN Aluminum, hexadeca-.mu.-hydroxytetracosahydroxy[.mu.8-[[1,3,4,6-tetra-O-sulfo-.beta.-D-fructofuranosyl .alpha.-D-glucopyranoside tetrakis(sulfato-.kappa.O')](8-)]hexadeca- (9CI) (CA INDEX NAME)

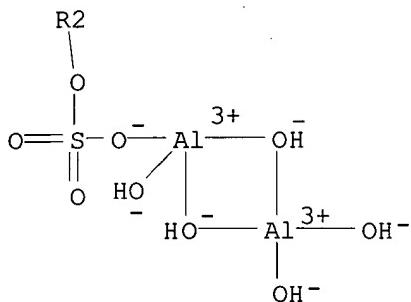
PAGE 1-A



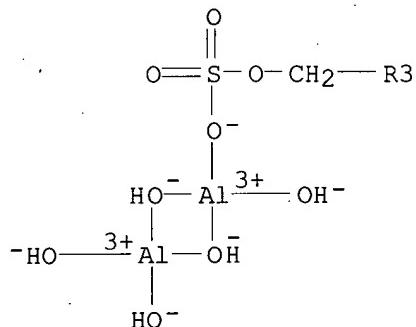
PAGE 2-A



PAGE 3-A



PAGE 4-A



IT 9004-34-6, Cellulose, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (microcryst.; absorbable solid compns. for topical treatment of oral
 mucosal disorders)

RN 9004-34-6 HCPLUS
 CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 8 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2002:568074 HCPLUS

DN 137:114281

TI Manufacture of coated plant **extract** powders and
dentifrices containing them

IN Moon, Hyun Soo; Lee, Seung Yul; Lee, Ki Hyun

PA Pacific Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 1, 11, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002212042	A2	20020731	JP 2001-11506	20010119 <--

PRAI JP 2001-11506 20010119 <--

AB Plant **exts.** effective for prevention and treatment of
 periodontal diseases or dental **caries** are supported on
 porous powd. carriers and coating the carrier surfaces with **water**
 -**insol.** coating agents. Pine leaf **ext.** was mixed with

NaCl and H₂O, the mixt. was supported on pptd. SiO₂, and coated with carnauba wax to give coated powder. A **toothpaste** contg. 1.0 wt.% of the coated powder was stable at 0, 30, 40, and 50.degree. for 3 mo and inhibited *Actinobacillus actinomycetemcomitans*, *Fusobacterium nucleatum*, ***Streptococcus mutans***, and ***Actinomyces viscosus***.

- ST plant **ext** support coating **dentifrice** stability; silica supported pine **ext** coating **dentifrice**; carnauba wax silica powder pine **dentifrice**
- IT Tea products
(beverages, green; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of periodontal diseases and dental **caries**)
- IT Deodorants (personal)
(breath fresheners; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of periodontal diseases and dental **caries**)
- IT Tooth
(**caries**; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of periodontal diseases and dental **caries**)
- IT Beeswax
(coating agent; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of periodontal diseases and dental **caries**)
- IT Carnauba wax
Hydrocarbon waxes, biological studies
Paraffin waxes, biological studies
Phosphatidylcholines, biological studies
Polyoxyalkylenes, biological studies
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
USES (Uses)
(coating agent; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of periodontal diseases and dental **caries**)
- IT Polyvinyl acetals
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
USES (Uses)
(dimethyloaminoacetates, coating agent; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of periodontal diseases and dental **caries**)
- IT **Periodontium**
(disease; manuf. of storage-stable coated powd. plant exts. for **dentifrices** for prevention of **periodontal** diseases and dental **caries**)
- IT Angelica acutiloba
Asiasarum sieboldii
Chamomile
Cimicifuga heracleifolia
Cinnamon (horticultural common name)
Cnidium officinale
Commelina communis
Dentifrices
Embryophytia
Gardenia jasminoides
Ginger
Grapefruit
Honeysuckle (*Lonicera japonica*)
Lagerstroemia indica
Ledebouriella seselooides
Licorice (*Glycyrrhiza glabra*)
Ligusticum sinense
Lycium chinense

Magnolia obovata

Mouthwashes

Mulberry (*Morus alba*)

Ophiopogon japonicus

Peony (*Paeonia suffruticosa*)

Pine (*Pinus*)

Platycodon grandiflorum

Polygonum cuspidatum

Rhatany (*Krameria*)

Rhus chinensis

Sanguinaria

Schizonepeta tenuifolia

Senna (*Cassia tora*)

Sophora japonica

Taraxacum mongolicum

Vigna angularis

Vitex rotundifolia

(manuf. of storage-stable coated powd. plant **exts.** for
dentifrices for prevention of **periodontal** diseases
 and dental **caries**)

IT Flavonoids

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(manuf. of storage-stable coated powd. plant **exts.** for
dentifrices for prevention of **periodontal** diseases
 and dental **caries**)

IT Perfumes

(myrrh; manuf. of storage-stable coated powd. plant **exts.** for
dentifrices for prevention of **periodontal** diseases
 and dental **caries**)

IT Aminoplasts

Diatomite

Phenolic resins, biological studies

Polyamides, biological studies

Polycarbonates, biological studies

Polyesters, biological studies

Zeolites (synthetic), biological studies

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(porous carrier; manuf. of storage-stable coated powd. plant
exts. for **dentifrices** for prevention of
periodontal diseases and dental **caries**)

IT Essential oils

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(sage; manuf. of storage-stable coated powd. plant **exts.** for
dentifrices for prevention of **periodontal** diseases
 and dental **caries**)

IT 88-12-0, biological studies 9002-89-5, Poly(vinyl alcohol) 9003-20-7,

Poly(vinyl acetate) 9004-57-3, Ethyl cellulose 9004-62-0

, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose

9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5,

Methyl cellulose 25322-68-3, Polyethylene glycol

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(coating agent; manuf. of storage-stable coated powd. plant
exts. for **dentifrices** for prevention of
periodontal diseases and dental **caries**)

IT 7647-14-5, Sodium chloride, biological studies

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(manuf. of storage-stable coated powd. plant **exts.** for
dentifrices for prevention of **periodontal** diseases

and dental caries)

IT 471-34-1, Calcium carbonate, biological studies 1314-23-4, Zirconia, biological studies 1327-43-1, Aluminum magnesium silicate 1335-30-4, Aluminum silicate 7631-86-9, Silica, biological studies 7757-93-9, Calcium secondary phosphate 7790-76-3, Calcium pyrophosphate 9002-86-2, Poly(vinyl chloride) 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-08-1, Melamine resin 9003-53-6, Polystyrene 9011-05-6, Urea resin 9011-14-7, Poly(methyl methacrylate) 10101-52-7, Zirconium silicate 10361-03-2, Sodium metaphosphate 21645-51-2, Aluminum hydroxide, biological studies
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)

(porous carrier; manuf. of storage-stable coated powd. plant exts. for dentifrices for prevention of periodontal diseases and dental caries)

IT 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)

(coating agent; manuf. of storage-stable coated powd. plant exts. for dentifrices for prevention of periodontal diseases and dental caries)

RN 9004-57-3 HCPLUS

CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 64-17-5

CMF C2 H6 O

H3C-CH2-OH

RN 9004-62-0 HCPLUS

CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1

CMF C2 H6 O2

HO-CH2-CH2-OH

RN 9004-64-2 HCAPLUS
 CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

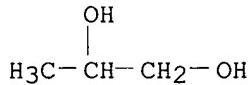
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-65-3 HCAPLUS
 CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

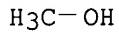
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

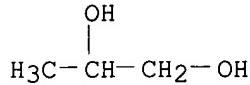
CM 2

CRN 67-56-1
 CMF C H4 O



CM 3

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-67-5 HCAPLUS
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O

H₃C-OH

L105 ANSWER 9 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2002:305739 HCPLUS

DN 136:315030

TI Soybean isoflavone aglycons for the prevention of **periodontal** diseases

IN Sekimoto, Yukiyō; Otsuki, Hidehiko

PA Sunstar, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K035-78

ICS A61K033-06; A61P001-02; A61P043-00

CC 63-6 (**Pharmaceuticals**)

Section cross-reference(s): 17

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002121146	A2	20020423	JP 2000-313712	20001013 <--
PRAI	JP 2000-313712		20001013 <--		

AB This invention relates to compns. contg. soybean isoflavone aglycons and calcium substances for the prevention of **periodontal** diseases, esp. for people with low bone d. and postmenopause women. For examples, granules were formulated contg. Ca gluconate 20, soya isoflavone aglycons 5, oil-sol. licorice exts. 1, xylitol 40, aspartame 0.1, arabic gum 1, flavors 2.5, and palatinit q.s. to 100 %.

ST soy isoflavone aglycon calcium **periodontal** disease

IT **Periodontium**

(disease; soybean isoflavone aglycons and Ca for prevention of **periodontal** diseases)

IT Drug delivery systems

(granules; soybean isoflavone aglycons and Ca for prevention of **periodontal** diseases)

IT Drug delivery systems

(lozenges; soybean isoflavone aglycons and Ca for prevention of **periodontal** diseases)

IT Candy

Chewing gum

(soybean isoflavone aglycons and Ca for prevention of **periodontal** diseases)

IT Isoflavonoids

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(soybean isoflavone aglycons and Ca for prevention of **periodontal** diseases)

IT Drug delivery systems

(tablets, buccal; soybean isoflavone aglycons and Ca for prevention of **periodontal** diseases)

IT 7440-70-2, Calcium, biological studies

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological

study); USES (Uses)
 (from shells; soybean isoflavone aglycons and Ca for prevention of
periodontal diseases)

IT 299-28-5, Calcium gluconate 7693-13-2, Calcium citrate 7758-87-4,
 Tricalcium phosphate
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
 study); USES (Uses)
 (soybean isoflavone aglycons and Ca for prevention of
periodontal diseases)

L105 ANSWER 10 OF 114 HCAPLUS COPYRIGHT 2003 ACS
 AN 2002:301726 HCAPLUS
 DN 136:315028
 TI Buccal tablets containing vitamins or calcium compounds for the prevention
 of **periodontal diseases**
 IN Otsuki, Hidehiko; Sekimoto, Sachiyō
 PA Sunstar, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K031-375
 ICS A61K009-20; A61K031-355; A61K033-06; A61K035-78; A61K047-10;
 A61K047-36; A61P001-02
 CC 63-6 (**Pharmaceuticals**)
 Section cross-reference(s): 62
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002121133	A2	20020423	JP 2000-313711	20001013 <--
PRAI	JP 2000-313711		20001013 <--		
AB	This invention relates to buccal tablets comprising vitamin C and E or Ca compds. and sugar alcs. selected from palatinit, maltitol, and sorbitol. The tablets further comprise natural products, such as licorice exts. , soybean isoflavones, tea exts. , and/or grape seed exts. A buccal tablet contained Ca from shells 30, oil-sol. licorice exts. 0.5, soy isoflavones 1, vitamin D3 (100,000 IU/g) 0.05, palatinit 21.45, maltitol 30, polydextrose 10, stevia 0.5, flavors 2.5, and sucrose fatty acid esters 4 %.				
ST	buccal tablet ascorbate tocopherol calcium periodontal disease				
IT	Alditols RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)				
IT	Periodontium (disease; buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)				
IT	Licorice (Glycyrrhiza) Tea (<i>Camellia sinensis</i>) (exts. ; buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)				
IT	Flavones RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (isoflavones, soya; buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)				
IT	Grape (seeds, exts. ; buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)				
IT	Drug delivery systems (tablets, buccal; buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)				

IT 50-70-4, Sorbitol, biological studies 50-81-7, Vitamin C, biological studies 134-03-2, Sodium ascorbate 299-28-5, Calcium gluconate 585-88-6, Maltitol 1406-18-4, Vitamin E 10191-41-0, dl-.alpha.-Tocopherol 64519-82-0, Palatinit
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)

IT 7440-70-2, Calcium, biological studies
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (from shells; buccal tablets contg. vitamins or calcium compds. for prevention of periodontal diseases)

L105 ANSWER 11 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2002:236847 HCAPLUS

DN 136:257281

TI **Licorice extract** for lowering blood LDL and cholesterol level

IN Cohen, Luba

PA Ready-Made 37 (1999) Ltd., Israel

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K035-78

ICS A61P029-00; A61P009-00; A61P013-00

CC 1-12 (Pharmacology)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1190717	A2	20020327	EP 2001-121933	20010912
	EP 1190717	A3	20021218		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002114695	A2	20020416	JP 2001-284787	20010919

PRAI IL 2000-138603 A 20000921

AB Described are a plurality of risk factors that may be treated and conditions that may be prevented and treated by administering to a patient a prepn. contg. a **licorice ext.**, which is **water insol.** and free from **glycyrrhizinic acid**. Risk factors that may be lowered include hypertension, high blood glucose concn., LDL susceptibility to retention, LDL susceptibility to aggregation, blood total cholesterol and LDL levels, and blood tryglycerides and VLDL concn. Conditions and diseases that may be treated according to the invention include atherosclerotic diseases, hypertension, cardiovascular diseases, chronic renal failure, carotid artery stenosis, coronary heart diseases, hypercholesterolemia, and hypertriglyceridemia. Efficacy of **licorice exts.** in lowering blood cholesterol level and LDL in patients consuming 100 mg **ext/day** for one month is described.

ST **licorice ext** blood LDL cholesterol
 antihypercholesterolemic

IT Antiarteriosclerotics

(antiatherosclerotics; **licorice ext.** for lowering blood LDL and cholesterol level)

IT Artery, disease

(carotid, stenosis, **licorice ext.** for the treatment of; **licorice ext.** for lowering blood LDL and cholesterol level)

IT Artery, disease

(coronary, **licorice ext.** for the treatment of; **licorice ext.** for lowering blood LDL and cholesterol

level)

IT Cardiovascular system
 (disease, **licorice ext.** for the treatment of;
licorice ext. for lowering blood LDL and cholesterol level)

IT Kidney, disease
 (failure, chronic, **licorice ext.** for the treatment of; **licorice ext.** for lowering blood LDL and cholesterol level)

IT Lipoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (high-d.; **licorice ext.** for lowering blood LDL and cholesterol level)

IT Anti-inflammatory agents
 Anticholesteremic agents
 Antidiabetic agents
 Antihypertensives
 Blood pressure
 (**licorice ext.** for lowering blood LDL and cholesterol level)

IT Glycerides, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (**licorice ext.** for lowering blood LDL and cholesterol level)

IT **Natural products, pharmaceutical**
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (**licorice; licorice ext.** for lowering blood LDL and cholesterol level)

IT Lipoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (low-d.; **licorice ext.** for lowering blood LDL and cholesterol level)

IT Lipoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (very-low-d.; **licorice ext.** for lowering blood LDL and cholesterol level)

IT 50-99-7, D-Glucose, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (blood level; **licorice ext.** for lowering blood LDL and cholesterol level)

L105 ANSWER 12 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2002:207515 HCPLUS

DN 136:236692

TI Topical preparations containing vitamin C derivatives and **licorice extracts**

IN Mori, Toshiharu; Kono, Masato

PA Nikko Seiyaku K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-48

ICS A61K007-00

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT.1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002080343	A2	20020319	JP 2001-295668	20010927
PRAI	JP 2001-295668		20010927		

AB This invention relates to topical compns. (pH 7-7.5) comprising 0.01-10 % vitamin C derivs. and 0.001-0.3 % oil-sol.

licorice exts. The compns. are irritation-free and storage stable and provide skin-lightening and beautifying effects. A lotion contained Na L-ascorbyl phosphate 3, **oil-sol.**

licorice exts. (BGSR) 6.5, citric acid 0.25, Na citrate 0.7, Na3EDTA 0.05, glycerin 5, xanthan gum (2 %) 20, ethanol 5, Simulgel-600 1.5, Na hyaluronate (1 %) 0.01, yeast **exts.** 10, and distd. water balance to 100 %.

ST cosmetic ascorbate **licorice ext**

IT **Licorice (Glycyrrhiza)**

(**exts.**; cosmetics contg. vitamin C derivs. and **licorice exts.**)

IT Cosmetics

(lotions; cosmetics contg. vitamin C derivs. and **licorice exts.**)

IT Cosmetics

(skin-lightening; cosmetics contg. vitamin C derivs. and **licorice exts.**)

IT 128808-26-4, Sodium ascorbyl phosphate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetics contg. vitamin C derivs. and **licorice exts**.
.)

L105 ANSWER 13 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2002:184873 HCPLUS

DN 136:252477

TI Methods for inhibiting decrease in transdermal flux of macromolecular drugs such as proteins by inhibition of pathway closure

IN Lin, Weiqi; Cormier, Michel J. N.; Daddona, Peter E.; Johnson, Juanita A.; Matriano, James A.

PA Alza Corporation, USA

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002019985	A2	20020314	WO 2001-US27551	20010906
	WO 2002019985	A3	20020906		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001088774	A5	20020322	AU 2001-88774	20010906
	US 2002102292	A1	20020801	US 2001-950436	20010908
PRAI	US 2000-231160P	P	20000908		
	WO 2001-US27551	W	20010906		

AB This invention relates to a method for inhibiting a decrease in the transdermal flux of an agent that is being transdermally delivered or sampled over a prolonged period of time wherein the delivery or sampling involves disrupting at least the stratum corneum layer of the skin to form pathways through which the agent passes. The desired result is achieved by co-delivering or co-sampling the agent with an amt. of at least one anti-healing agent wherein the amt. of the anti-healing agent is effective in inhibiting a decrease in the agent transdermal flux compared to when

the delivery or sampling of the agent is done under substantially identical conditions except in the absence of the anti-healing agent(s). For example, pentosan polysulfate (PPS), a highly neg. charged compd., does not penetrate the skin significantly without the use of penetration enhancers or phys. disruption of the skin barrier. Between 1 h and 24 h, PPS flux through the skin of guinea pigs decreased by about 12 fold, demonstrating pathway closure. Citric acid and 1,2,6-hexanetriol inhibited this decrease in flux. Flux in the presence of 1,2,6-hexanetriol was decreased by less than 2 fold between 1 and 24 h. Total amt. transported was increased about 4 and 7 folds in the presence of citric acid and 1,2,6-hexanetriol, resp.,.

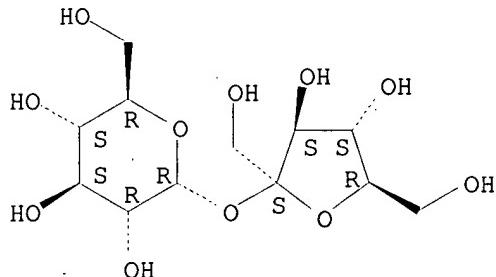
- ST macromol drug transdermal flux skin disruption antihealing agent
- IT Osmotic pressure
 - (agents for; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Anti-inflammatory agents
 - Anticoagulants
 - Biological transport
 - Plasmid vectors
 - Skin
 - Surfactants
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Laminins
 - Polyoxalkylenes, biological studies
 - Silica gel, biological studies
 - RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Macromolecular compounds
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Nucleic acids
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Oligonucleotides
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Peptides, biological studies
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Phosphorothioate oligonucleotides
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Polysaccharides, biological studies
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Proteins
 - RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological

- study); USES (Uses)
 (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Vaccines
 (hepatitis B; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Cell migration
 (inhibitors; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Skin
 (stratum corneum; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT Drug delivery systems
 (transdermal; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT 64-19-7, Acetic acid, biological studies 1132-61-2, MOPS 10043-35-3,
 Boric acid, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (buffer; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT 50-69-1, Ribose 50-70-4, Sorbitol, biological studies 50-78-2, Aspirin
 50-99-7, D-Glucose, biological studies 56-40-6, Glycine, biological studies 56-81-5, Glycerin, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 60-00-4, EDTA, biological studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropyl alcohol, biological studies 67-68-5, Dimethyl sulfoxide, biological studies 77-92-9, Citric acid, biological studies 77-92-9D, Citric acid, salts 87-89-8, Inositol 99-20-7, Trehalose 106-69-4, 1,2,6-Hexanetriol 107-88-0, 1,3-Butanediol 110-63-4, 1,4-Butanediol, biological studies 111-46-6, Diethylene glycol, biological studies 111-48-8, Thiodiglycol 111-90-0 112-27-6, Triethylene glycol 123-03-5, **Cetylpyridinium chloride** 127-09-3, Sodium acetate 144-33-2, Citric acid disodium salt 149-32-6, Erythritol 151-21-3, Sodium dodecyl sulfate, biological studies 151-73-5, Betamethasone sodium phosphate 488-81-3, Adonitol 513-85-9, 2,3-Butanediol 527-07-1, Gluconic acid, sodium salt 584-03-2, 1,2-Butanediol 631-61-8, Ammonium acetate 676-46-0, Malic acid, disodium salt 868-18-8, Tartaric acid, disodium salt 921-60-8, L-Glucose 1185-53-1, Tromethamine hydrochloride 1772-03-8, Galactosamine hydrochloride 2836-32-0, Glycolic acid, sodium salt 3837-04-5 6000-74-4, Hydrocortisone sodium phosphate 7647-14-5, Sodium chloride, biological studies 9004-10-8, Insulin, biological studies 9004-54-0, Dextran, biological studies 9004-62-0, Hydroxyethyl cellulose 9005-49-6, Heparin, biological studies 9005-64-5, Tween 20 10043-52-4, Calcium chloride, biological studies 12125-02-9, Ammonium chloride, biological studies 14984-34-0, Sodium glucuronate 22144-77-0, Cytochalasin D 25053-27-4, Lyapolate sodium 25322-68-3, Polyethylene glycol 57495-14-4, Ketoprofen sodium 99896-85-2 110590-65-3 140207-93-8 146439-94-3 185229-68-9, ISIS 2302
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT 9005-80-5, Inulin 404566-98-9, DECAD
 RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)

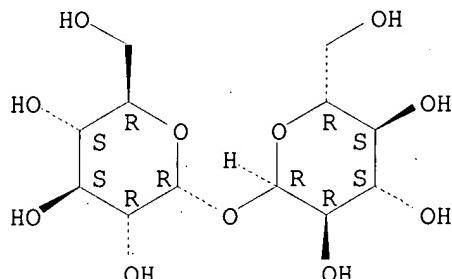
- IT 7631-86-9, Silica, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (fumed; disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- IT 57-50-1, Sucrose, biological studies 99-20-7, Trehalose
 123-03-5, **Cetylpyridinium chloride**
 9004-54-0, Dextran, biological studies 9004-62-0,
 Hydroxyethyl cellulose
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
- RN 57-50-1 HCPLUS
 CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

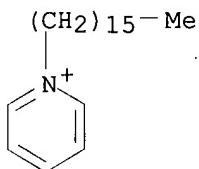


- RN 99-20-7 HCPLUS
 CN .alpha.-D-Glucopyranoside, .alpha.-D-glucopyranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



- RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl⁻

RN 9004-54-0 HCPLUS
 CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-62-0 HCPLUS
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
 CMF C₂ H₆ O₂

HO—CH₂—CH₂—OH

IT 9005-80-5, Inulin
 RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (disruptions in stratum corneum by microprotrusion and anti-healing agents for increase of transdermal flux of macromol. drugs)
 RN 9005-80-5 HCPLUS
 CN Inulin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 14 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 2002:107048 HCPLUS

DN 136:156435

TI Pharmaceutical compositions for the treatment of inflammatory and ulcerative conditions of moist epithelial surfaces such as mucositis, stomatitis and Behcet's syndrome

IN Mastrodonato, Marco
 PA Sinclair Pharma S.r.l., Italy
 SO PCT Int. Appl., 9 pp.
 CODEN: PIXXD2

DT Patent
 LA English
 IC ICM A61K
 CC 63-6 (Pharmaceuticals)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002009637	A2	20020207	WO 2001-EP8303	20010718 <--
	WO 2002009637	A3	20021205		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	IT 2000MI1732	A1	20020128	IT 2000-MI1732	20000728 <--
	AU 2002012113	A5	20020213	AU 2002-12113	20010718 <--
PRAI	IT 2000-MI1732	A	20000728 <--		
	WO 2001-EP8303	W	20010718 <--		
AB	Pharmaceutical compns. comprising as active ingredients EDs of hyaluronic acid, glycyrrhetic acid and polyvinylpyrrolidone, for the treatment of painful, inflammatory and ulcerative conditions of moist epithelial surfaces such as mucositis and Behcet's syndrome. Thus, a formulation contained sodium hyaluronate 0.1, glycyrrhetic acid 0.06, PVP 9.0, maltodextrin 6.00, propylene glycol 2.94, potassium sorbate 0.3, sodium benzoate 0.3, hydroxyethyl cellulose 1.5, hydrogenated castor oil PEG-40 0.27, disodium EDTA 0.1, benzalkonium chloride 0.5, perfume (Glycyrrhiza ext.) 0.16, sodium saccharin 0.1, and water 78.44%.				
ST	pharmaceutical inflammation epithelium; antiinflammatory pharmaceutical; ulcer inhibitor pharmaceutical; stomatitis pharmaceutical; Behcet syndrome pharmaceutical				
IT	Quaternary ammonium compounds, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (alkylbenzyldimethyl, chlorides; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Drug delivery systems (bioadhesive; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Drug delivery systems (emollients; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Viscosity (enhancers; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Mouth (epithelium; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Castor oil RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydrogenated, ethoxylated; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Esophagus Mucous membrane (inflammation; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)				
IT	Anesthetics (local; pharmaceuticals for treatment of inflammatory and ulcerative				

- conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Mouth
Vagina
(mucosa, inflammation; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Pharynx
(oropharynx, inflammation; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Analgesics
Anti-inflammatory agents
Antibacterial agents
Antilulcer agents
Behcet's syndrome
Disinfectants
Flavoring materials
Fungicides
Human
Odor and Odorous substances
Perfumes
Preservatives
Solubilizers
Stabilizing agents
Surfactants
Sweetening agents
(pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Intestine
(rectum, mucosa, inflammation; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Mouth
(stomatitis; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Drug delivery systems
(topical; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT Mucous membrane
(vaginal, inflammation; pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT 57-55-6, Propylene glycol, biological studies 79-10-7D, Acrylic acid, polymers 79-41-4D, Methacrylic acid, polymers 107-21-1, Ethylene glycol, biological studies 128-44-9, Sodium saccharin 471-53-4, **Glycyrrhetic acid** 532-32-1, Sodium benzoate 9003-39-8, Polyvinylpyrrolidone 9004-34-6D, Cellulose, derivs. 9004-53-9, Dextrin 9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethyl cellulose 9050-36-6, Maltodextrin 9067-32-7, Sodium hyaluronate 12712-38-8, Potassium borate 13840-56-7, Sodium borate 22839-47-0, Aspartame RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceuticals for treatment of inflammatory and ulcerative conditions of moist epithelial surfaces and stomatitis and Behcet's syndrome)
- IT 471-53-4, **Glycyrrhetic acid**
9004-34-6D, Cellulose, derivs. 9004-53-9, Dextrin 9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethyl cellulose 9050-36-6, Maltodextrin 9067-32-7, Sodium

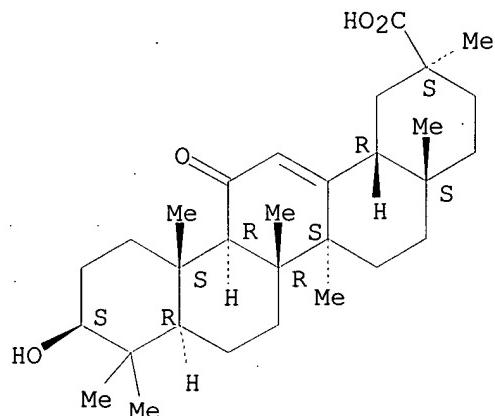
hyaluronate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (pharmaceuticals for treatment of inflammatory and ulcerative
 conditions of moist epithelial surfaces and stomatitis and Behcet's
 syndrome)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.béta.,20.βeta.)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



RN 9004-34-6 HCPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-53-9 HCPLUS

CN Dextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-61-9 HCPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-62-0 HCPLUS

CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1

CMF C₂ H₆ O₂

HO—CH₂—CH₂—OH

RN 9050-36-6 HCPLUS

CN Maltodextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9067-32-7 HCAPLUS
 CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 15 OF 114 HCAPLUS COPYRIGHT 2003 ACS
 AN 2002:91690 HCAPLUS
 DN 136:107281
 TI Mouth cavity disease treatment agent
 IN Vainshtein, V. A.; Kurinnaya, E. I.; Afinogenov, G. E.; Shelkovnikova, I. A.
 PA Tovarishchestvo s Ogranichennoi Otvetstvennost'yu "Nauchno-Proizvodstvennaya Firma "Farkos", Russia
 SO Russ., No pp. given
 CODEN: RUXXE7
 DT Patent
 LA Russian
 IC ICM A61K007-16
 ICS A61K009-06
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RU 2160088	C1	20001210	RU 1999-123030	19991102 <--
PRAI RU 1999-123030		19991102		<--

AB The agent contains gramicidin C, traditional auxiliary substances (polyethylene oxide, milk sugar, refined sugar, and calcium stearate), and, addnl., liquorice and Althaea exts. and menthol. Use of the product strengthened antibacterial, antiinflammatory, and expectoration effects during prolonged time (up to 1.5 h).

ST bactericide dentifrice antiinflammatory expectorant

IT Mouth
 (disease; oral cavity disease treatment agent)

IT Althaea
 (exts.; oral cavity disease treatment agent)

IT Anti-inflammatory agents
 Antibacterial agents

Dentifrices

Expectorants

Licorice (Glycyrrhiza)

(oral cavity disease treatment agent)

IT Polyoxyalkylenes, biological studies
 RL: COS (Cosmetic use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral cavity disease treatment agent)

IT 9062-61-7, Gramicidin c
 RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (oral cavity disease treatment agent)

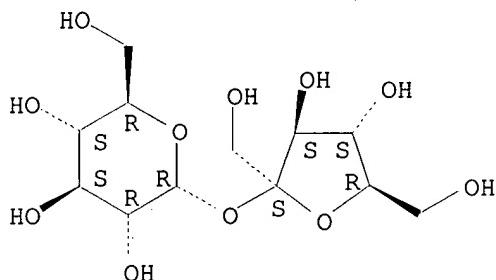
IT 57-50-1, Sucrose, biological studies 63-42-3, Lactose
 1490-04-6, Menthol 1592-23-0, Calcium stearate 25322-68-3,
 Polyethylene oxide
 RL: COS (Cosmetic use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral cavity disease treatment agent)

IT 57-50-1, Sucrose, biological studies 63-42-3, Lactose
 RL: COS (Cosmetic use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral cavity disease treatment agent)

RN 57-50-1 HCAPLUS

CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

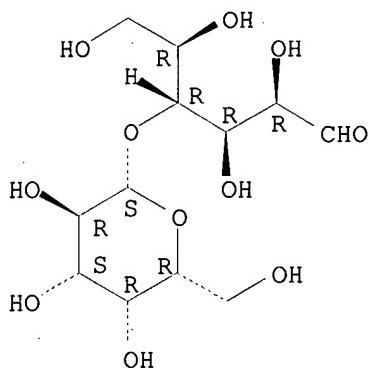
Absolute stereochemistry.



RN 63-42-3 HCPLUS

CN D-Glucose, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L105 ANSWER 16 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2002:77403 HCPLUS

DN 136:139652

TI **Dentifrices** containing polyphosphate and acrylate polymers

IN Inoue, Shimako; Uchiyama, Akira

PA Lion Corp., Japan

SO Jpn. Kokai Tokyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002029949	A2	20020129	JP 2000-218585	20000719
PRAI	JP 2000-218585		20000719		

AB This invention relates to **dentifrices** comprising linear or cyclic water-sol. polyphosphoric acid salts and **water-insol.** powders of acrylate copolymers for effective stain removal. A dental cream contained acrylic acid-iso-Pr acrylate copolymer (av. diam. 25 .mu.m) 20, propylene glycol 3, sorbitol 15, xylitol 5, Na CM cellulose 1, Na polyacrylate 1, Na saccharin 0.1, stevioside 0.1, K **glycyrrhizinate** 1, Na lauryl sulfate 1, tranexamic acid 0.05, methylparaben 0.05, perfumes 1, Na pyrophosphate 5, phenoxyethanol 2, and water q.s. to 100 %.

ST stain removing **dentifrice** polyphosphate polyacrylate
 IT **Dentifrices**
Mouthwashes
 (stain-removing **dentifrices** contg. polyphosphate and acrylate
 polymers and arom. alcs.)
 IT 60-12-8, Phenylethyl alcohol 100-51-6, Phenylmethyl alcohol, biological
 studies 122-97-4, 3-Phenylpropanol 122-99-6, Phenoxyethanol
 770-35-4, Phenoxyisopropanol 7722-88-5, Tetrasodium pyrophosphate
 7758-29-4, Sodium tripolyphosphate 9003-04-7, Sodium polyacrylate
 9003-21-8, Polymethyl acrylate 14986-84-6, Sodium tetrapolyphosphate
 25302-81-2, Acrylic acid-methyl acrylate copolymer 30772-44-2, Acrylic
 acid-isopropyl acrylate copolymer 41593-38-8, Phenoxypropanol
 171969-71-4 392292-87-4
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (stain-removing **dentifrices** contg. polyphosphate and acrylate
 polymers and arom. alcs.)

L105 ANSWER 17 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2001:873171 HCPLUS

DN 136:10919

TI Cosmetic compositions containing **water-insoluble**
 components and nonionic surfactants

IN Yasue, Ryoji

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-00

ICS A61K007-00; A61K007-50

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001335413	A2	20011204	JP 2000-157175	20000526
PRAI	JP 2000-157175		20000526		

AB The invention relates to a cosmetic compn. contg. a **water-insol.** component and a nonionic surfactant $R_1O(C_2H_4O)_nH$ ($R_1 = C_6-24$ alkyl, alkenyl; $n = \text{ave. nos. of oxyethylene}$), wherein the compn. satisfies (a) $n = 5-15$, (b) $n < 3$; the amt. of the nonionic surfactant is .1toreq. 10 %, or (c) Y_i (total mass of nonionic surfactants in ranges between $n_{MAX}-2$ and $n_{MAX}+2$) .gtoreq. 55% ($n_{MAX} = \text{av. nos. of oxyethylene of the surfactants having max. mass}$). The compn. have improved dispersion stability while maintaining good use feel. A cosmetic lotion contg. **Glycyrrhiza ext.** 0.2, tocopherol acetate 0.1, stearyl glycyrrhizate 0.1, ethanol 5, parabens 0.3, alkyl-modified carboxyvinyl polymer (Pemulen TR-1) 0.3, triisopropanol amine 0.3, nonionic surfactant (Conol 30OC) 2, 1,3-butylene glycol 5, dipotassium glycyrrhizate 0.1, hamamelis **ext.** 0.2, fragrance 0.05, and water q.s. to 100 % was formulated.

ST cosmetic dispersion **water insoluble** component nonionic surfactant

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C16-18, Conol 30OC; cosmetic compns. contg. **water-insol.** components and nonionic surfactants)

IT Paraffin oils

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Thiotec; cosmetic compns. contg. **water-insol.** components and nonionic surfactants)

IT Fats and Glyceridic oils, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(almond; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT Jojoba oil
Lecithins
Paraffin waxes, biological studies
Polyamide fibers, biological studies
Sunflower oil
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(cosmetic compns. contg. **water-insol.** components
and nonionic surfactants)

IT Cosmetics
(creams; cosmetic compns. contg. **water-insol.**
compónents and nonionic surfactants)

IT Cyclosiloxanes
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(di-Me; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT Cosmetics
(emulsions; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT Castor oil
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(hydrogenated, ethoxylated, KHC 80, HC 60; cosmetic compns. contg.
water-insol. components and nonionic surfactants)

IT Cosmetics
(lotions; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT Hydrocarbon waxes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(microcryst.; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT Surfactants
(nonionic; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(rice bran; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 36653-82-4, 1-Hexadecanol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(Conol 1695; dcosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 51852-65-4, GM 40
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(GM 40; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 52006-45-8, Isocetyl isostearate
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(ICIS; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 142-91-6, Isopropylpalmitate
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(IPP-EX; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 14807-96-6, Talc, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(JA 24A; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 31566-31-1, Glyceryl monostearate
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(MGS-A; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 540-10-3, Cetylpalmitate
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(N-SP; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 9005-00-9, Polyoxyethylene stearyl ether
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(Nikkol BS 20; cosmetic compns. contg. **water-insol.**
components and nonionic surfactants)

IT 56-81-5, Glycerin, biological studies 58-95-7, Tocopherol acetate
111-02-4, Squalene 112-92-5, Conol 30S 476-66-4, Ellagic acid
556-67-2, Octamethylcyclotetrasiloxane 661-19-8, Behenyl alcohol
1318-93-0, Kunipia G, biological studies 2074-53-5, dl-.alpha.-
Tocopherol 7440-21-3, Silicon, biological studies 7631-86-9, Silica,
biological studies 9004-73-3, PolyMethylsiloxane 13832-70-7, Stearyl
glycyrrhetinate 24937-16-4, Orgasol 2002 42557-10-8, KF 96-10
49553-76-6, DGMO-90 67965-56-4, Diglyceryl dioleate 68890-66-4,
Octopirox 276254-07-0, KMP-600 375392-93-1, CMC Titan CR 50
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(cosmetic compns. contg. **water-insol.** components
and nonionic surfactants)

L105 ANSWER 18 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2001:843812 HCPLUS

DN 135:376568

TI Composition and method for inhibiting oral bacteria

IN Zhou, James H.

PA USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K035-78

ICS A01N065-00

NCL 424725000

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6319523	B1	20011120	US 2000-606294	20000629 <--
PRAI US 2000-606294		20000629 <--		

AB A compn. for inhibiting oral bacteria, comprises: (1) a polyphenol compn.
contg. at least one polyphenol selected from the group consisting of
catechin, resveratrol and combinations thereof; (2) a mogroside compn.
standardized to contain at least about 2 % wt. of mogroside V; and (3) a
licorice ext., the licorice being an org.
solvent sol. and **water insol.** fraction.

ST antibacterial dentifrice polyphenol mogroside **licorice ext**

IT **Dentifrices**
 Peanut (*Arachis hypogaea*)
 Pine (*Pinus*)
 (antibacterial **dentifrices** contg. polyphenols and mogroside
 and **licorice exts.**)

IT Acacia catechu
 Apocynum
 Areca catechu
 Camellia
 Elaeagnus
 Geranium (genus)
 Ginkgo biloba
 Grape
 Licorice (*Glycyrrhiza glabra*)
 Licorice (*Glycyrrhiza inflata*)
 Licorice (*Glycyrrhiza uralensis*)
 Machilus
 Momordica grosvenori
 Polygonum
 Potentilla fragarioides
 Prunus
 Rhubarb (Rheum)
 (**exts.**; antibacterial **dentifrices** contg.
 polyphenols and mogroside and **licorice exts.**)

IT Fusobacterium nucleatum
 Porphyromonas **gingivalis**
Streptococcus mutans
 (inhibition by; antibacterial **dentifrices** contg. polyphenols
 and mogroside and **licorice exts.**)

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (polyphenols, nonpolymeric; antibacterial **dentifrices** contg.
 polyphenols and mogroside and **licorice exts.**)

IT 154-23-4, Catechin 501-36-0, Resveratrol 88901-36-4, Mogroside V
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (antibacterial **dentifrices** contg. polyphenols and mogroside
 and **licorice exts.**)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
 (1) Anon; WO 1148 1995
 (2) Anon; EP 684772 1995 HCAPLUS
 (3) Zhou; US 6103240 2000 HCAPLUS
 (4) Zhou; US 6124442 2000 HCAPLUS

L105 ANSWER 19 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:736819 HCAPLUS

DN 135:277785

TI **Dentifrices** containing cationic disinfectants

IN Sugiyama, Shinji; Doi, Nobuyuki; Kondo, Keiichiro; Ejiri, Shigeyuki;
 Ishii, Yoshikazu

PA Nippon Zettoc Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICS A61K045-08; A61K047-36; A61P001-02; A61P031-04

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2001278759 A2 20011010 JP 2000-96217 20000331 <--
 PRAI JP 2000-96217 20000331 <--

AB This invention relates to antibacterial **dentifrices** comprising cationic disinfectants, anionic surfactants, **water-insol** . glucomannan, and optional nonionic surfactants. The compns. provide long-lasting bactericidal activities. A **dentifrice** contained **cetylpyridinium chloride** 0.5, Na lauryl sulfate 0.1, glucomannan 0.5, CaCO₃ 30, silica 5, glycerin 15, sorbitol 20, Na CMC 1, Na saccharin 0.1, Na benzoate 0.1, .beta.-**glycyrrhetic acid** 0.1, flavors 1, and water q.s. to 100 %.

ST **dentifrice** cationic disinfectant glucomannan surfactant; antibacterial **dentifrice** **cetylpyridinium chloride** glucomannan

IT **Dentifrices**
 (antibacterial; **dentifrices** contg. cationic disinfectants and surfactants and glucomannan)

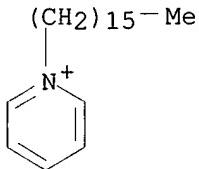
IT Antibacterial agents
 Surfactants
 (**dentifrices** contg. cationic disinfectants and surfactants and glucomannan)

IT Castor oil
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hydrogenated, ethoxylated; **dentifrices** contg. cationic disinfectants and surfactants and glucomannan)

IT 121-54-0, Benzethonium chloride **123-03-5**,
Cetylpyridinium chloride 137-16-6, Sodium lauroyl sarcosine 151-21-3, Sodium lauryl sulfate, biological studies 1191-50-0, Sodium myristyl sulfate 3697-42-5, Chlorhexidine hydrochloride **11078-31-2**, Glucomannan 18472-51-0, Chlorhexidine gluconate 115905-40-3, Decalinium chloride
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**dentifrices** contg. cationic disinfectants and surfactants and glucomannan)

IT **123-03-5, Cetylpyridinium chloride**
11078-31-2, Glucomannan
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**dentifrices** contg. cationic disinfectants and surfactants and glucomannan)

RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



Cl-

RN 11078-31-2 HCPLUS
 CN D-Gluco-D-mannan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 20 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 2001:707164 HCPLUS
 DN 135:247044
 TI **Mouthwashes** containing bactericides and anti-inflammatories
 IN Segawa, Hiroyuki; Naito, Junko
 PA Earth Chemical Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K045-06
 ICS A61K007-16; A61K007-26; A61P001-02
 CC 62-7 (Essential Oils and Cosmetics)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001261576	A2	20010926	JP 2000-80598	20000322 <--
PRAI JP 2000-80598		20000322 <--		

AB This invention relates to **mouthwashes** comprising bactericides and anti-inflammatories to be used after removal of food residues from teeth. The compns. are effective in preventing dental plaques and **gingivitis**. The preferred bactericides are cationic surfactants and the anti-inflammatories are preferably **glycyrrhizinic acid** salts. A **mouthwash** soln. contained propylene glycol 3, polyoxyethylene cetyl ether 0.3, Na phosphate 0.2, flavors 0.073, Na tripolyphosphate 0.05, cyclodextrin 0.5, **cetylpyridinium chloride** 0.03, dipotassium **glycyrrhizinate** 0.15 g, and distd. water q.s. to 100 mL.

ST **mouthwash gingivitis plaque prevention**
bactericide antiinflammatory; cetylpyridinium chloride
glycyrrhizinate antiplaque mouthwash

IT Quaternary ammonium compounds, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (alkylbenzyldimethyl, chlorides; **mouthwashes** contg. bactericides and anti-inflammatories)

IT **Mouthwashes**
 (antiplaque; **mouthwashes** contg. bactericides and anti-inflammatories)

IT Surfactants
 (cationic; **mouthwashes** contg. bactericides and anti-inflammatories)

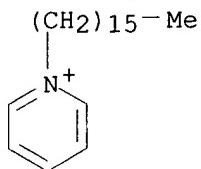
IT **Gingiva**
 (**gingivitis**, prevention of; **mouthwashes** contg. bactericides and anti-inflammatories)

IT Anti-inflammatory agents
 Antibacterial agents
 (**mouthwashes** contg. bactericides and anti-inflammatories)

IT 123-03-5, **Cetylpyridinium chloride**
 68797-35-3, Dipotassium **glycyrrhizinate**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**mouthwashes** contg. bactericides and anti-inflammatories)

IT 123-03-5, **Cetylpyridinium chloride**
 68797-35-3, Dipotassium **glycyrrhizinate**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**mouthwashes** contg. bactericides and anti-inflammatories)

RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



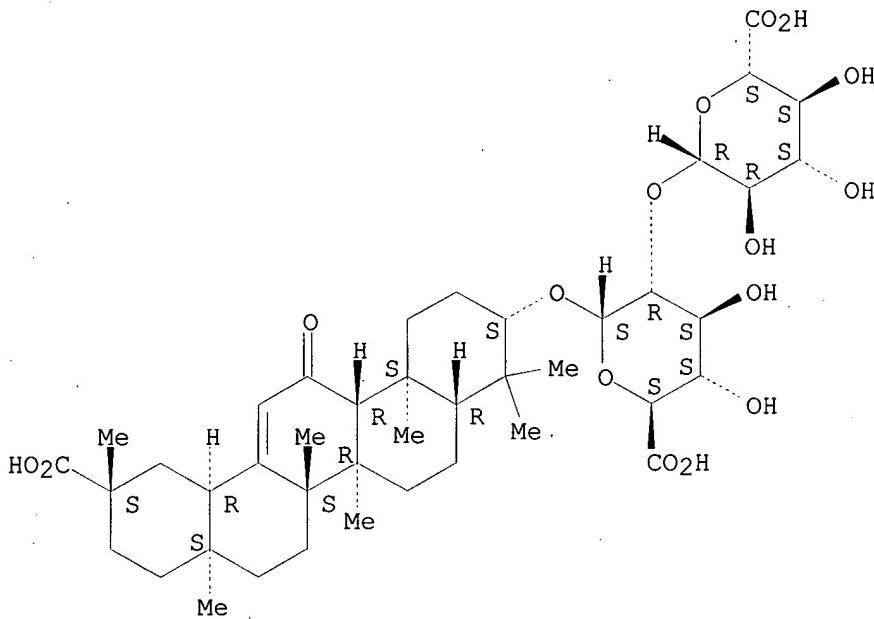
● Cl⁻

RN 68797-35-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

L105 ANSWER 21 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2001:551850 HCPLUS

DN 135:142003

TI Immunostimulating dentifrice compositions for inhibition of dental plaque formation and treatment of periodontal diseases

IN Morishima, Seiji

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-16
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001206830	A2	20010731	JP 2000-16561	20000126 <--
PRAI	JP 2000-16561		20000126 <--		

AB Title compns. contain **water-insol.** or immiscible .beta.-D-glucan and monoterpenes, sesquiterpenes, diterpenes, and/or triterpenes. .beta.-D-Glucan and the terpenes show synergistic effect. Thus, an aq. soln. contg. pachyman and camphene inhibited 42.0% dental **plaque** formation in dogs, vs. 7.5% and 0.2%, resp., when applied alone.

ST synergistic glucan terpene dental **plaque** inhibition; **dentifrice** pachyman camphene treatment **periodontal** disease; immunostimulating **dentifrice** glucan terpene synergistic

IT **Periodontium**

(disease; immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT **Dentifrices**

(immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT Diterpenes

Monoterpenes

Sesquiterpenes

Triterpenes

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT **Tooth**

(**plaque**; immunostimulating **dentifrice** compns.

contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT Antibacterial agents

Immunostimulants

(synergistic; immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT 79-92-5, Camphene 87-44-5, Caryophyllene 89-80-5, Menthone 138-86-3, Limonene 499-75-2, Carvacrol 515-69-5, Bisabolol 1402-10-4, Lichenan 9008-22-4, Laminaran 9037-88-1, Pachyman 9041-22-9D, .beta.-D-Glucan, mixts. 9064-51-1, Callose 29070-92-6, Pachymic acid 37331-28-5, Pustulan 39464-87-4, Sclerotan 51052-65-4, Paramylon 54724-00-4, Curdlan 55466-10-9, Luteose

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT 80-56-8, .alpha.-Pinene 127-91-3, .beta.-Pinene 150-86-7, Phytol 471-53-4, Glycyrrhetic acid

1405-86-3, Glycyrrhizinic acid 4602-84-0,

Farnesol 7212-44-4, Nerolidol 57817-89-7, Stevioside

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

IT 465-99-6, Hederagenin

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulating **dentifrice** compns. for inhibition of dental **plaque** formation and treatment of **periodontal** diseases)

IT 9008-22-4, Laminaran 9041-22-9D, .beta.-D-Glucan, mixts.

54724-00-4, Curdlan

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

RN 9008-22-4 HCPLUS

CN Laminaran (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9041-22-9 HCPLUS

CN .beta.-D-Glucan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 54724-00-4 HCPLUS

CN Curdlan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 471-53-4, Glycyrrhetic acid

1405-86-3, Glycyrrhizinic acid

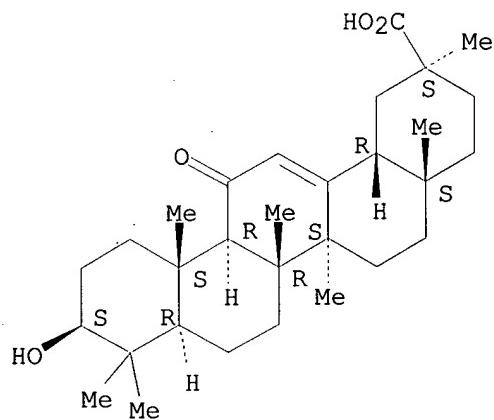
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulating **dentifrice** compns. contg. terpenes and .beta.-glucan for treatment of **periodontal** diseases)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.beta.,20.beta.)- (9CI) (CA INDEX NAME)

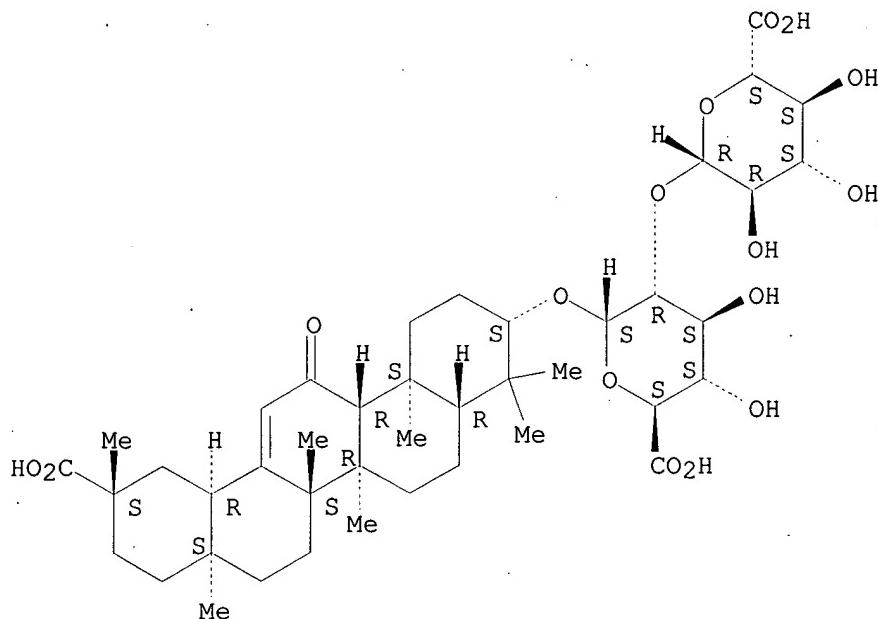
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 22 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:531915 HCAPLUS

DN 135:111752

TI **Dentifrice** compositions with reduced loss of **water-insoluble** active ingredients

IN Yamamoto, Mizuya; Hiratsuka, Susumu; Aratani, Yuko

PA Lion Corp., Japan

SO Jpn. Kokai Tokyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001199854	A2	20010724	JP 2000-7469	20000117
PRAI	JP 2000-7469				

AB Title compns. contain anionic surfactants, **water-insol**. active ingredients, and polyols, wherein water content against the polyols is $\text{.1toreq.} 0.4$ by wt. Thus, a **toothpaste** contg. glycerin, propylene glycol, Na lauryl sulfate, and triclosan (water content 0.40 against triclosan) was stored at 50.degree. for 1 mo to show 92% residual triclosan.

ST lauryl sulfate triclosan propylene glycol **dentifrice**; anionic surfactant polyol triclosan **dentifrice**; glycerin triclosan lauryl sulfate **dentifrice**

IT Surfactants
(anionic; **dentifrice** compns. contg. anionic surfactants, **water-insol.** active ingredients, and polyols)

IT **Dentifrices**
(**dentifrice** compns. contg. anionic surfactants, **water-insol.** active ingredients, and polyols)

IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(polyhydric; **dentifrice** compns. contg. anionic surfactants, **water-insol.** active ingredients, and polyols)

IT 137-16-6, Lauroylsarcosine sodium 151-21-3, Sodium lauryl sulfate, biological studies 1449-05-4, .beta.-**Glycyrrhetic acid** 3380-34-5, Triclosan 39660-61-2, Isopropylmethylphenol
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (dentifrice compns. contg. anionic surfactants, water
 -insol. active ingredients, and polyols)

IT 50-70-4, Sorbitol, biological studies 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies
 RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
 (dentifrice compns. contg. anionic surfactants, water
 -insol. active ingredients, and polyols)

L105 ANSWER 23 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2001:459863 HCPLUS

DN 135:66222

TI Compositions for treatment of **periodontal** disease, and device for applying the compositions

IN Oka, Hironori

PA Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K033-00

ICS A61C017-00; A61K039-395; A61P001-02

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001172186	A2	20010626	JP 1999-357002	19991216 <--
PRAI	JP 1999-357002		19991216 <--		

AB The invention relates to an agent for treatment of **periodontal** disease contg. deep sea water, super oxidized water, magnetic wave-motion water, alkali ion water, and/or antibody-contg. water, suitable for apply to **teeth** or **gingiva** with a specified device. A soln. contg. deep sea water 1.5, egg yolk antibody powder contg. IgY against actinobacillus actinomycetemcomitans 0.1 g was formulated and applied to patients with **periodontal** disease.

ST **periodontal** disease deep sea water antibody

IT Bacteroides forsythus

Campylobacter rectus

Fusobacterium nucleatum

Haemophilus actinomycetemcomitans

Lactobacillus

Porphyromonas gingivalis

Streptococcus mutans

Streptococcus sobrinus

Treponema denticola

(IgY against; compns. for treatment of **periodontal** disease, and device for applying compns.)

IT Immunoglobulins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Y; compns. for treatment of **periodontal** disease, and device for applying compns.)

IT Quaternary ammonium compounds, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkylbenzyldimethyl, chlorides; compns. for treatment of **periodontal** disease, and device for applying compns.)

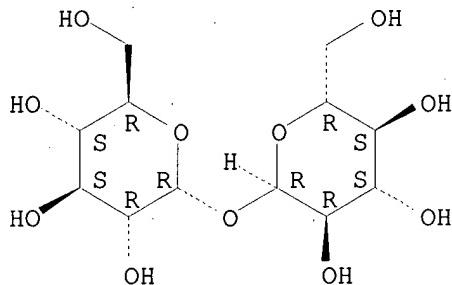
IT Cork tree (*Phellodendron*)

(bark, exts.; compns. for treatment of **periodontal** disease,

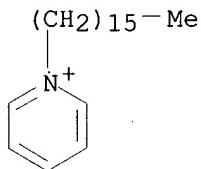
- and device for applying compns.)
- IT Dental materials and appliances
 Disinfectants
 Peppermint (*Mentha piperita*)
 Propolis
 (compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT Carbohydrates, biological studies
Isomaltoligosaccharides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT Seawater
 (deep; compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT **Periodontium**
 (disease; compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT Essential oils
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lavender; compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT Egg yolk
 (powder, IgY-contg.; compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT Essential oils
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (rosemary; compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT Drug delivery systems
 (topical; compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT 55-56-1, Chlorohexidine 56-40-6D, Glycine, alkyldiaminoethyl derivs., chloride, biological studies 60-32-2, .epsilon.-Aminocaproic acid 80-97-7, Dihydrocholesterol 87-99-0, Xylitol 97-59-6 **99-20-7**, Trehalose 121-54-0 **123-03-5**, **cetylpyridinium chloride** 123-92-2, Isoamylacetate 140-11-4, Benzyl acetate 141-78-6, Ethyl acetate, biological studies 154-23-4, Catechin 275-51-4, Azulene 499-44-5, Hinokitiol 516-95-0, Epidihydrocholesterol 522-51-0, Dequalinium chloride **546-46-3**, Zinc citrate 585-88-6, Maltitol 623-42-7, Methylbutyrate 638-49-3, Amylformate 659-70-1, Isoamyl Isovalerate 1197-18-8, Tranexamic acid 1317-25-5 **1405-86-3**, **Glycyrrhizinic acid** 3380-34-5 5579-81-7, Aluminum dihydroxy allantoinate 7631-97-2, Sodium monofluorophosphate 7647-14-5, Sodium chloride, biological studies 7681-49-4, Sodium fluoride, biological studies 7783-48-4, Strontium fluoride 9001-63-2, Lysozyme **9012-76-4**, Chitosan **13718-94-0**, Palatinose 15763-48-1, Pionin 39660-61-2, Isopropyl methyl phenol 52225-20-4, dl-.alpha.-Tocopherol acetate RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compns. for treatment of **periodontal** disease, and device for applying compns.)
- IT 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-09-7, Potassium, biological studies 7440-23-5, Sodium, biological studies 7440-47-3, Chromium, biological studies **7440-50-8**, **Copper**, biological studies **7440-66-6**, Zinc, biological studies 7440-70-2, Calcium, biological studies 7553-56-2, Iodine, biological studies 7723-14-0, Phosphorus, biological studies 7782-49-2, Selenium, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (deep sea water contg.; compns. for treatment of **periodontal** disease, and device for applying compns.)

- IT 7732-18-5, Water, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (super oxidized water, magnetic wave-motion water, or alkali ion water;
 compns. for treatment of **periodontal** disease, and device for
 applying compns.)
- IT 99-20-7, Trehalose 123-03-5, **cetylpyridinium**
chloride 546-46-3, Zinc citrate
 1405-86-3, **Glycyrrhizinic acid**
 9012-76-4, Chitosan 13718-94-0, Palatinose
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compns. for treatment of **periodontal** disease, and device for
 applying compns.)
- RN 99-20-7 HCPLUS
- CN .alpha.-D-Glucopyranoside, .alpha.-D-glucopyranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

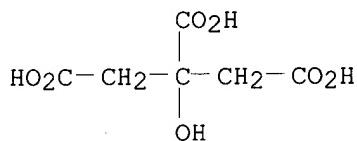


- RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl⁻

- RN 546-46-3 HCPLUS
 CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)

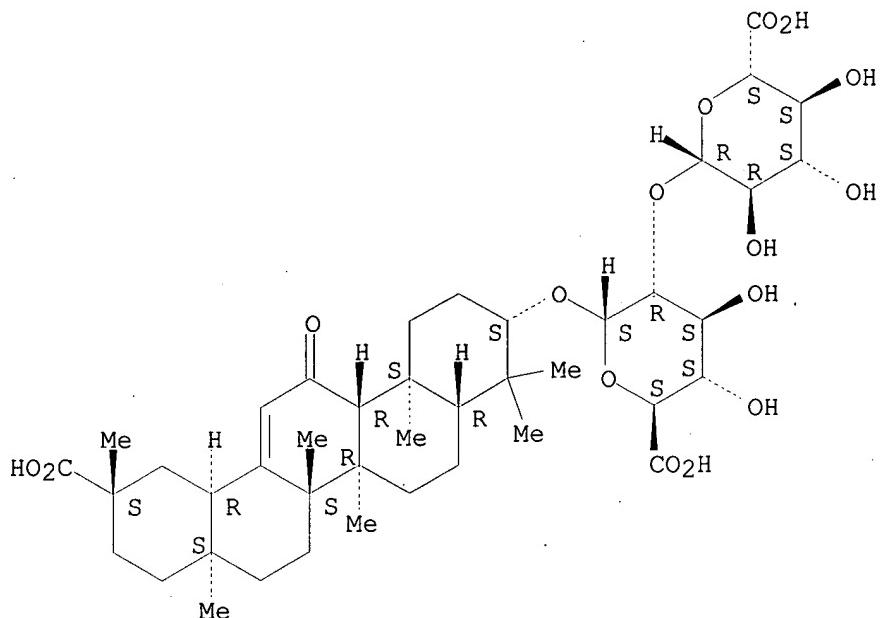


3/2 Zn

- RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9012-76-4 HCPLUS

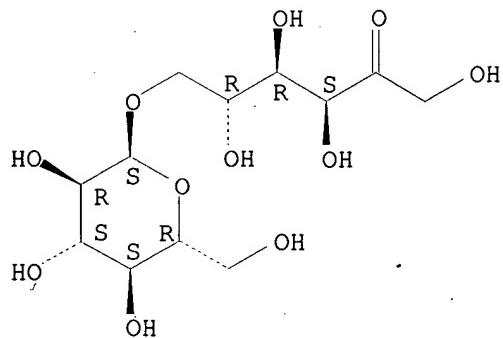
CN Chitosan (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 13718-94-0 HCPLUS

CN D-Fructose, 6-O-.alpha.-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 7440-50-8, Copper, biological studies 7440-66-6
, Zinc, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(deep sea water contg.; compns. for treatment of periodontal
disease, and device for applying compns.)

RN 7440-50-8 HCPLUS

CN Copper (7CI, 8CI, 9CI) (CA INDEX NAME)

Cu

RN 7440-66-6 HCAPLUS
 CN Zinc (7CI, 8CI, 9CI) (CA INDEX NAME)

Zn

L105 ANSWER 24 OF 114 HCAPLUS COPYRIGHT 2003 ACS
 AN 2001:449170 HCAPLUS
 DN 135:51062
 TI Gums containing antimicrobial agents
 IN Iyer, Loka Nathan M.; Barkans, Dawn E.; Hench, Brian D.
 PA Optiva Corporation, USA
 SO U.S., 18 pp., Cont.-in-part of U.S. Ser. No. 316,074, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K007-16
 ICS A61K007-26
 NCL 424049000
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 1, 62

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6248309	B1	20010619	US 1999-378557	19990819 <--
	US 5939050	A	19990817	US 1997-832821	19970404 <--
	WO 2001012144	A1	20010222	WO 2000-US22975	20000821 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 1997-825525 A2 19970404 <--
 US 1997-832821 A1 19970404 <--
 US 1999-316074 B2 19990520 <--
 US 1999-378557 A1 19990819 <--

AB Gum compns. contg. effective amts. of antimicrobial agents that are released to the oral cavity during chewing. In specific embodiments, the antimicrobial agents are released from the gum at different rates and times. Thus, 6 chewing gum formulations contg. 6 different antimicrobial agents were formed by incorporating the agents into a com. peppermint gum base formulation. The percent of the particular antimicrobial agents that were released from the gum bolus after 25 min was detd., providing an indication of whether the concn. in the saliva at any time was above the MIC for the particular agent. Eighty-five percent ammonium **glycyrrhizinate** was released from the chewed gum.

ST chewing gum antimicrobial; tooth disease chewing gum;
glycyrrhizinate chewing gum

IT Essential oils

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (basil, Ocimum basilicum; chewing gums contg. antimicrobial agents)

- IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cedarwood; chewing gums contg. antimicrobial agents)
- IT Antibacterial agents
 Antimicrobial agents
 Chewing gum
Dentifrices
 (chewing gums contg. antimicrobial agents)
- IT Drug delivery systems
 (chewing gums; chewing gums contg. antimicrobial agents)
- IT **Tooth**
 (disease; chewing gums contg. antimicrobial agents)
- IT **Licorice (*Glycyrrhiza glabra*)**
 (exts.; chewing gums contg. antimicrobial agents)
- IT **Actinomyces viscosus**
 Fusobacterium nucleatum
 Porphyromonas gingivalis
Streptococcus mutans
Streptococcus sanguinis
 (inhibition; chewing gums contg. antimicrobial agents)
- IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (juniper, Juniperus communis berry; chewing gums contg. antimicrobial agents)
- IT 56-75-7, Chloramphenicol 106-24-1, Geraniol 633-65-8, Berberine hydrochloride 1405-86-3, **Glycyrrhizic acid**
 2086-83-1, Berberine 53956-04-0, **Glycyrrhizic acid** ammonium salt 214749-68-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chewing gums contg. antimicrobial agents)

RE.CNT 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adames; Inst Roslin Przetworow Zielarskich 1983, V4(1), P95 HCAPLUS
- (2) Alson; US 428033 1890
- (3) Ambike; US 4545979 1985 HCAPLUS
- (4) Ambike; US 4550018 1985 HCAPLUS
- (5) Anon; JP 4628430 1971
- (6) Anon; FR 2377195 1978 HCAPLUS
- (7) Anon; JP 5857320 1981
- (8) Anon; JP 58140014 1983 HCAPLUS
- (9) Anon; JP 59175410 1984 HCAPLUS
- (10) Anon; EP 0205133 A1 1986 HCAPLUS
- (11) Anon; EP 0227108 1987 HCAPLUS
- (12) Anon; JP 63198616 1988 HCAPLUS
- (13) Anon; JP 03109314 1991 HCAPLUS
- (14) Anon; JP 03255031 1991
- (15) Anon; EP 0605321 A1 1994 HCAPLUS
- (16) Anon; JP 07309733 1995
- (17) Anon; JP 07316064 1995 HCAPLUS
- (18) Anon; JP 59175410 1995 HCAPLUS
- (19) Anon; JP 725764 1995
- (20) Anon; JP 789819 1995
- (21) Anon; EP 0805198 1997 HCAPLUS
- (22) Anon; HU 213478 1997
- (23) Anon; FR 2743722 1997 HCAPLUS
- (24) Anon; WO 9715277 1997 HCAPLUS
- (25) Anon; WO 9728805 1997 HCAPLUS

- (26) Anon; WO 9844901 1998 HCAPLUS
- (27) Anon; WO 9844926 1998 HCAPLUS
- (28) Anon; WO 9933352 1999 HCAPLUS
- (29) Azuma; 1995 HCAPLUS
- (30) Doi; 1971 HCAPLUS
- (31) Faryniarz; US 5135747 1992 HCAPLUS
- (32) Gauvreau; US 3787566 1974 HCAPLUS
- (33) Haas; US 3940476 1976 HCAPLUS
- (34) Hayashi; US 4606911 1986 HCAPLUS
- (35) Herman; US 5190979 1993 HCAPLUS
- (36) Higashi; US 4933182 1990 HCAPLUS
- (37) Howard; US 5824291 1998 HCAPLUS
- (38) Hsu; US 5190944 1993 HCAPLUS
- (39) Hussein; US 5298238 1994 HCAPLUS
- (40) Iyer; US 5939050 1999 HCAPLUS
- (41) Kabara, J; Cosmetic and Drug Preservation:Principles and Practice 1984, P237 HCAPLUS
- (42) Kabara, J; Cosmetic and Drug Preservation:Principles and Practice 1984, P274
- (43) Kanebo Foods Ltd; 1984 HCAPLUS
- (44) Kedzia, B; 1994, V40(1-2), P5 HCAPLUS
- (45) Kyle; US 1492299 1924 HCAPLUS
- (46) Ladanyi; US 4145412 1979
- (47) Ladanyi; US 4406881 1983 HCAPLUS
- (48) Ladanyi; US 4599228 1986 HCAPLUS
- (49) Lukacovic; US 5145666 1992 HCAPLUS
- (50) Lukacovic; US 5213790 1993 HCAPLUS
- (51) Lukacovic; US 5281410 1994 HCAPLUS
- (52) Majeti; US 5004597 1991 HCAPLUS
- (53) Majeti; US 5281411 1994 HCAPLUS
- (54) Marques, M; Antimicrobial Agents and Chemotherapy 1997, V1(5), P881
- (55) Mazzanobile; US 5094843 1992 HCAPLUS
- (56) Megallia, S; Herba Pol 1980, V26(3), P181
- (57) Michaels; US 4839158 1989 HCAPLUS
- (58) Miyake; US 4913895 1990 HCAPLUS
- (59) Mookherjec, B; Encyclopedia of Chemical Technology, 4th Ed 1996, V17, P603
- (60) Morris, J; J Am Oil Chem Soc 1979, V56(5), P595 HCAPLUS
- (61) Nabi; US 4894220 1990 HCAPLUS
- (62) Nabi; US 5472684 1995 HCAPLUS
- (63) Nakahara; US 5409692 1995
- (64) Nakatsu; US 5453276 1995 HCAPLUS
- (65) Nishida; 1991 HCAPLUS
- (66) Optiva Corp; WO PCTUS9806470 1998
- (67) Oshino; US 5374418 1994 HCAPLUS
- (68) Pan; US 5082653 1992 HCAPLUS
- (69) Parran; US 4999184 1991 HCAPLUS
- (70) Pensak; US 3876759 1975
- (71) Prencipe; US 5256402 1993 HCAPLUS
- (72) Purohit; US 4966754 1990
- (73) S S Pharmaceutical Co Ltd; 1983 HCAPLUS
- (74) Sakuma; US 5009898 1991 HCAPLUS
- (75) Sakuma; US 5268174 1993 HCAPLUS
- (76) Sakuma; US 5468489 1995 HCAPLUS
- (77) Sampathjkumar; US 5110583 1992 HCAPLUS
- (78) Schiraldi; US 4992259 1991 HCAPLUS
- (79) Suhonen; US 4961924 1990 HCAPLUS
- (80) Suhonen; US 5009884 1991 HCAPLUS
- (81) Suhonen; US 5017363 1991 HCAPLUS
- (82) Vinson; US 4022880 1977 HCAPLUS
- (83) Voerman; US 5316760 1994 HCAPLUS
- (84) White; US 5338537 1994 HCAPLUS
- (85) Yamaguchi; US 5658584 1997 HCAPLUS
- (86) Yokota; Igaku to Seibutsugaku 1994, V128(3), P105 HCAPLUS

(87) Zeines; US 5378465 1995

(88) Zelaya; US 5376374 1994

IT 1405-86-3, Glycyrrhizic acid

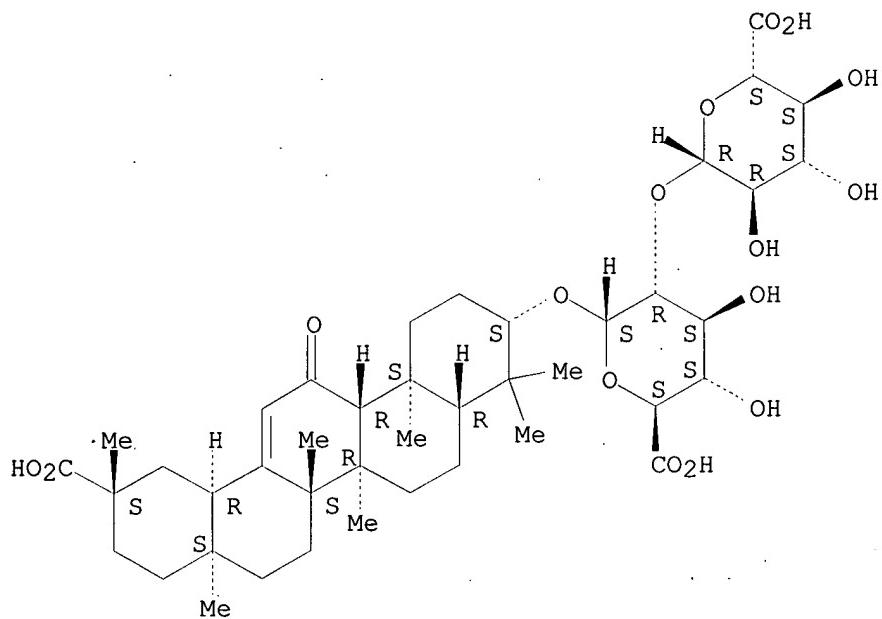
53956-04-0, Glycyrrhizic acid ammonium salt

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chewing gums contg. antimicrobial agents)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

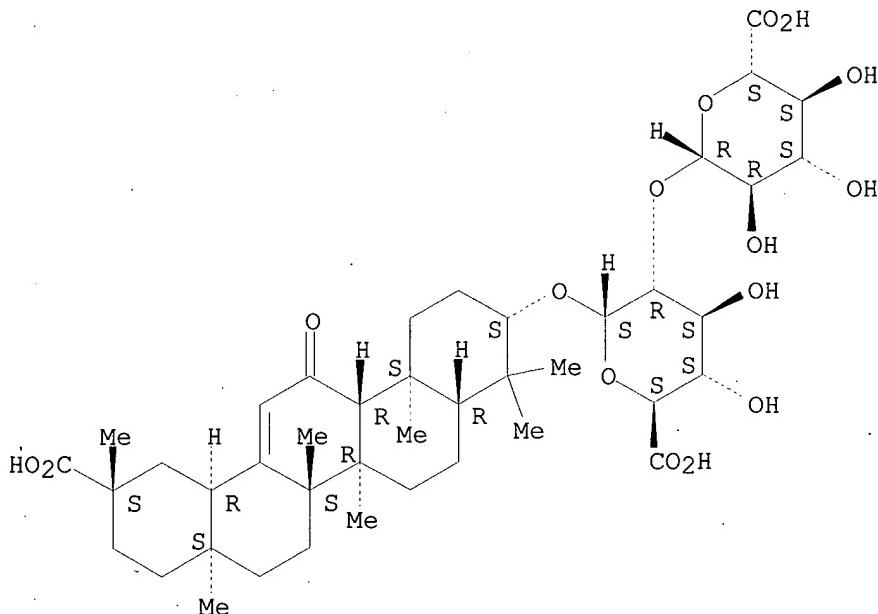


RN 53956-04-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● NH₃

L105 ANSWER 25 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:444496 HCAPLUS

DN 135:37208

TI Controlled-release sticks to use in buccal cavities

IN Kojima, Nobuo

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K009-00

ICS A61K007-16; A61K031-047; A61K047-32; A61P001-02

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001163768	A2	20010619	JP 1999-351251	19991210 <--

PRAI JP 1999-351251 19991210 <--

AB This invention relates to sustained-release stick compns. comprising PVP (av. mol. wt. >gtoreq. 300,000), xylitol and/or erythritol to be inserted between teeth or into the gum or to be adhered onto the dental surface for the treatment and prevention of dental caries, gingivitis, periodontitis, and tooth hypersensitivity. A stick compn. for the treatment of periodontitis contained xylitol 30, cetylpyridinium chloride 0.05, flavors 1.95, Et cellulose 5, and PVP 63 %.

ST buccal stick PVP xylitol dental disease

IT Tooth

(**caries**; controlled-release buccal sticks for treatment of dental diseases)

IT **Gingiva**
 (gingivitis; controlled-release buccal sticks for treatment of dental diseases)

IT **Tooth**
 (hyperesthesia; controlled-release buccal sticks for treatment of dental diseases)

IT **Drug delivery systems**
 (oral, controlled-release, sticks; controlled-release buccal sticks for treatment of dental diseases)

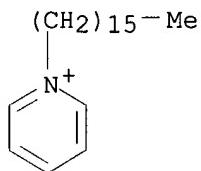
IT **Periodontium**
 (periodontitis; controlled-release buccal sticks for treatment of dental diseases)

IT 87-99-0, Xylitol **123-03-5, Cetylpyridinium chloride** 149-32-6, Erythritol 499-44-5, Hinokitiol 7681-49-4, Sodium fluoride, biological studies 7757-79-1, Potassium nitrate, biological studies 9003-39-8, PVP 9066-59-5, Lysozyme chloride **68797-35-3, Dipotassium glycyrrhizinate**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (controlled-release buccal sticks for treatment of dental diseases)

IT **123-03-5, Cetylpyridinium chloride**
68797-35-3, Dipotassium glycyrrhizinate
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (controlled-release buccal sticks for treatment of dental diseases)

RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)

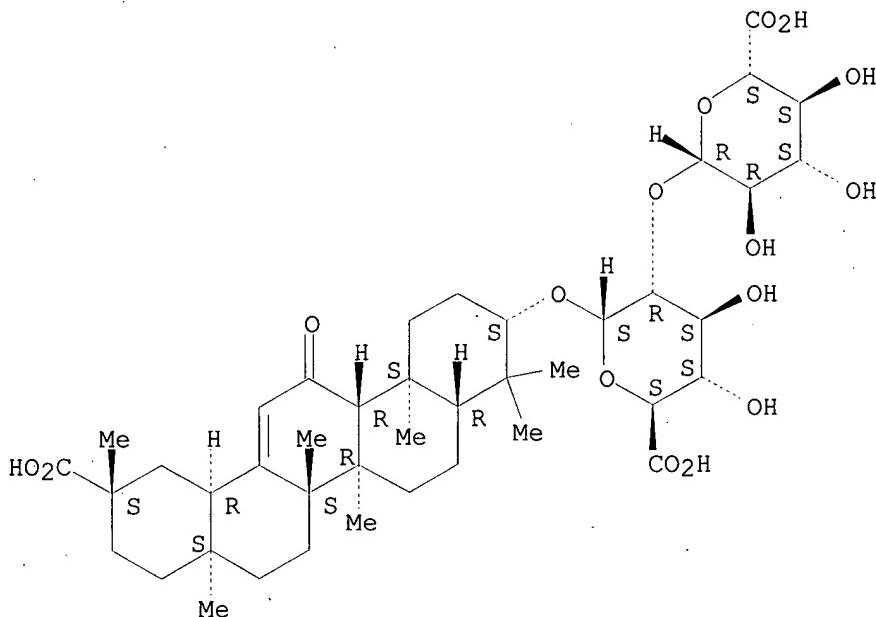


● Cl⁻

RN 68797-35-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

L105 ANSWER 26 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:407941 HCAPLUS

DN 135:24687

TI Method for preparation of plant **extract** powder

IN Moon, Hyun Soo; Lee, Byung Ryeul; Lee, Key Hyun

PA Pacific Corporation, S. Korea

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-26

ICS A61K009-14; A61K009-16; A01N065-00

NCL 424058000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 11

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6241975	B1	20010605	US 2000-478356	20000106 <--
	US 6503541	B1	20030107	US 2001-847283	20010503 <--
PRAI	KR 1999-30186	A	19990724 <--		
	KR 1999-43040	A	19991006 <--		
	US 2000-478356	A1	20000106 <--		

AB The present invention relates to a method for prepn. of plant **ext** powder and **oral compns.** contg. plant **ext**.powder prepd. by the same. More particularly, the present invention could provide a method for prepn. of plant **ext.** powder comprising the steps of (a) loading a plant **ext.** having activities of

prevention of and treatment for **periodontal** diseases or tooth decay into a porous powder carrier; (b) coating said carrier's surface with a **water-insol.** coating agent and **oral compns.** contg. plant **ext.** powder prepd. by the above described method which have an excellent **periodontal** diseases preventing effect and tooth decay preventing effect.

- ST plant **ext** powder
- IT Gall (plant tumor)
 - (Chinese; method for prepn. of plant **ext.** powder)
- IT Powders
 - (Plant **ext.**; method for prepn. of plant **ext.** powder)
- IT Carboxylic acids, biological studies
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (Polyhydroxy-; method for prepn. of plant **ext.** powder)
- IT Carriers
 - (Porous powder; method for prepn. of plant **ext.** powder)
- IT Coating materials
 - (**Water-insol.**; method for prepn. of plant **ext.** powder)
- IT Tea products
 - (beverages, green; method for prepn. of plant **ext.** powder)
- IT Vigna angularis
 - (black; method for prepn. of plant **ext.** powder)
- IT **Tooth**
 - (**caries**; method for prepn. of plant **ext.** powder)
- IT Drug delivery systems
 - (carriers; method for prepn. of plant **ext.** powder)
- IT Commelina
 - (dayflower; method for prepn. of plant **ext.** powder)
- IT Polyvinyl acetals
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (dimethylaminoacetate derivs.; method for prepn. of plant **ext.** powder)
- IT **Periodontium**
 - (disease; method for prepn. of plant **ext.** powder)
- IT Alpinia katsumadai
 - Angelica dahurica
 - Asarum
 - Bark
 - Beeswax
 - Chamomile
 - Cimicifuga
 - Cinnamon (horticultural common name)
 - Cnidium
 - Composition
 - Crape myrtle
 - Dandelion
 - Extraction**
 - Flower
 - Ginger
 - Grapefruit
 - Honeysuckle (Lonicera)
 - Licorice (Glycyrrhiza)**
 - Lycium
 - Lythrum salicaria
 - Mixing
 - Mulberry
 - Nepeta
 - Nothosmyrnium
 - Particle size
 - Particles

Peony (Paeonia)
 Pine (Pinus)
 Plant (Embryophyta)
 Platycodon
Polygonum cuspidatum
 Propolis
 Rhatany (Krameria)
 Root
 Sage (Salvia)
 Sanguinaria
 Scutellaria
 Seed
 Senna (Cassia)
 Seseli
 Sophora
 Surface
 Weight
 (method for prepн. of plant **ext.** powder)

IT Aminoplasts
 Carnauba wax
 Diatomite
 Flavonoids
 Glycerides, biological studies
 Glycolipids
 Hydrocarbon waxes, biological studies
 Paraffin waxes, biological studies
 Phenolic resins, biological studies
 Phospholipids, biological studies
 Polyamides, biological studies
 Polycarbonates, biological studies
 Polyesters, biological studies
 Salts, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (method for prepн. of plant **ext.** powder)

IT Perfumes
 (myrrh, Arabian myrrh; method for prepн. of plant **ext.** powder)

IT Drug delivery systems
 (oral; method for prepн. of plant **ext.** powder)

IT Drug delivery systems
 (powders; method for prepн. of plant **ext.** powder)

IT Liriope
 (rhizome; method for prepн. of plant **ext.** powder)

IT Angelica koreana
 (root; method for prepн. of plant **ext.** powder)

IT 88-12-0, biological studies 108-05-4D, Vinylacetate, copolymers
 471-34-1, Calcium carbonate, biological studies 1314-23-4, Zirconium
 oxide, biological studies 1327-43-1, Aluminum magnesium silicate
 1335-30-4, Aluminum silicate 7631-86-9, Silicon dioxide, biological
 studies 7732-18-5, Water, biological studies 7757-93-9, Calcium
 monohydrogen phosphate 9002-86-2, Polyvinylchloride 9002-88-4,
 Polyethylene 9002-89-5, Polyvinylalcohol 9003-07-0 9003-08-1,
 Melamine resin 9003-53-6 **9004-57-3**, Ethylcellulose
9004-62-0, Hydroxyethylcellulose **9004-64-2**,
 Hydroxypropylcellulose **9004-65-3**, Hydroxypropylmethylcellulose
9004-67-5, Methyl cellulose 9011-05-6, Urea resin 9011-14-7,
 Polymethylmethacrylate 10086-45-0, Calcium pyrophosphate 10101-52-7,
 Zirconium silicate 21645-51-2, Aluminum hydroxide, biological studies
 50813-16-6, Sodium metaphosphate
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (method for prepн. of plant **ext.** powder)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Anon; JP 58134013 1983 HCPLUS
- (2) Anon; JP 62138420 1987
- (3) Anon; JP 09110663 1997 HCPLUS
- (4) Greene; US 4689216 1987 HCPLUS
- (5) Grimm; US 4071614 1978
- (6) Park; US 4919933 1990
- (7) Souda; US 5239079 1993 HCPLUS

IT 9004-57-3, Ethylcellulose 9004-62-0,
 Hydroxyethylcellulose 9004-64-2, Hydroxypropylcellulose
 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5,
 Methyl cellulose
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (method for prepn. of plant ext. powder)

RN 9004-57-3 HCPLUS

CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 64-17-5
 CMF C2 H6 O



RN 9004-62-0 HCPLUS

CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
 CMF C2 H6 O2



RN 9004-64-2 HCPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

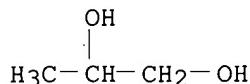
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-65-3 HCPLUS
 CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

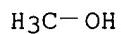
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

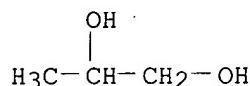
CM 2

CRN 67-56-1
 CMF C H4 O



CM 3

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-67-5 HCPLUS
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

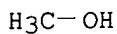
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
 CMF C H4 O



L105 ANSWER 27 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:270148 HCAPLUS

DN 134:265574

TI Solubilization of licorice oil
extract

IN Tsukiyama, Ryoichi; Taniguchi, Shigeru; Takimoto, Yoshio

PA Higashimaru Shoyu Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A23L001-30

ICS A23L001-212; A61K007-00; A61K035-78

CC 17-9 (Food and Feed Chemistry)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001103932	A2	20010417	JP 1999-289278	19991012
PRAI	JP 1999-289278		19991012		

AB Licorice oil ext., a sucrose fatty acid ester, and gelatin are dissolved in aq. alc. soln., optionally, with salts and/or urea. The soln. is stable and useful as additive to food and cosmetics.

ST licorice oil ext solubilization

sucrose fatty acid ester

IT Fatty acids, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(esters with sucrose; solubilization of licorice oil ext. by)

IT Licorice (Glycyrrhiza)

(oil; solubilization of licorice oil ext.)

IT Gelatins, biological studies

Salts, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(solubilization of licorice oil

ext. by sucrose fatty acid esters and)

IT 57-50-1D, Sucrose, esters with fatty acids

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(solubilization of licorice oil ext. by)

IT 57-13-6, Urea, biological studies 64-17-5, Ethanol, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(solubilization of licorice oil

ext. by sucrose fatty acid esters and)

IT 57-50-1D, Sucrose, esters with fatty acids

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

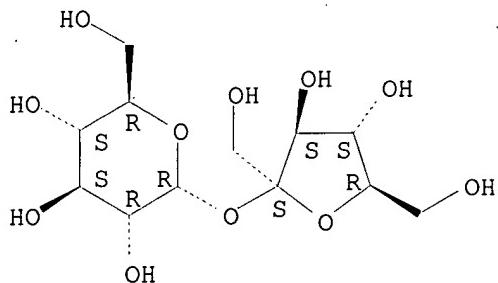
(solubilization of licorice oil

ext. by)

RN 57-50-1 HCAPLUS

CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 28 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2001:174043 HCPLUS

DN 134:227154

TI **Dentifrice** compositions containing **terpene alcohols**

IN Takahashi, Hirokazu; Arai, Kenichi

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001064136	A2	20010313	JP 1999-239691	19990826 <--
PRAI	JP 1999-239691		19990826 <--		

AB The compns. contain sweet bases and bitter terpene alcs. The alcs. mask unpleasant sweetness of the bases. A **toothpaste** was prep'd. from CaCO₃ 35.0, sorbitol 25.0, Na saccharin 0.1, propylene glycol 5.0, Na CM-cellulose 1.0, carrageenan 1.0, Me p-hydroxybenzoate 0.1, Na lauryl sulfate 1.5, perfume 1.0, linalool 0.001, and H₂O to 100 wt.%.

ST **dentifrice** bitter terpene alc sweetness masking;
toothpaste linalool sweetness masking

IT Bitter principles
Dentifrices
Sweetness

(**dentifrices** contg. bitter terpene alcs. for masking of sweetness).

IT **Licorice (Glycyrrhiza glabra)**
(exts., sweet substances; **dentifrices** contg. bitter terpene alcs. for masking of sweetness)

IT Terpenes, biological studies
RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(hydroxy; **dentifrices** contg. bitter terpene alcs. for masking of sweetness)

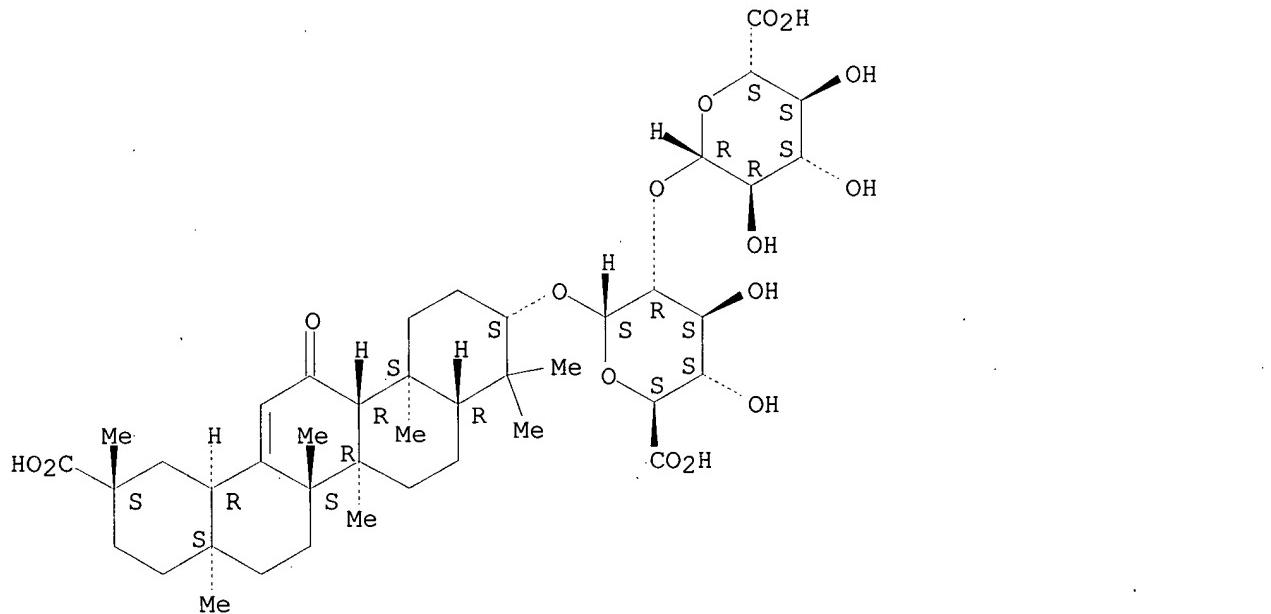
IT Stevia
(sweet substances; **dentifrices** contg. bitter terpene alcs. for masking of sweetness)

IT **Fructooligosaccharides**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(sweet substances; **dentifrices** contg. bitter terpene alcs. for masking of sweetness)

IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

- (terpenoid; **dentifrices** contg. bitter terpene alcs. for masking of sweetness)
- IT 78-70-6, Linalool 105-87-3, Geranyl acetate 106-22-9, Citronellol 106-24-1, Geraniol 115-95-7, Linalyl acetate 150-84-5, Citronellyl acetate 529-02-2, Pulegol 1490-04-6, Menthol 16409-45-3, Menthyl acetate
 RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
 (dentifrices contg. bitter terpene alcs. for masking of sweetness)
- IT 50-70-4, Sorbitol, biological studies 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol, biological studies 58-86-6, D-Xylose, biological studies 87-99-0, Xylitol 128-44-9, Saccharin sodium 1405-86-3, Glycyrrhizin 22839-47-0, Aspartame 68797-35-3, Dipotassium glycyrrhizinate
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (sweet substance; dentifrices contg. bitter terpene alcs. for masking of sweetness)
- IT 1405-86-3, Glycyrrhizin 68797-35-3,
 Dipotassium glycyrrhizinate
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (sweet substance; dentifrices contg. bitter terpene alcs. for masking of sweetness)
- RN 1405-86-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

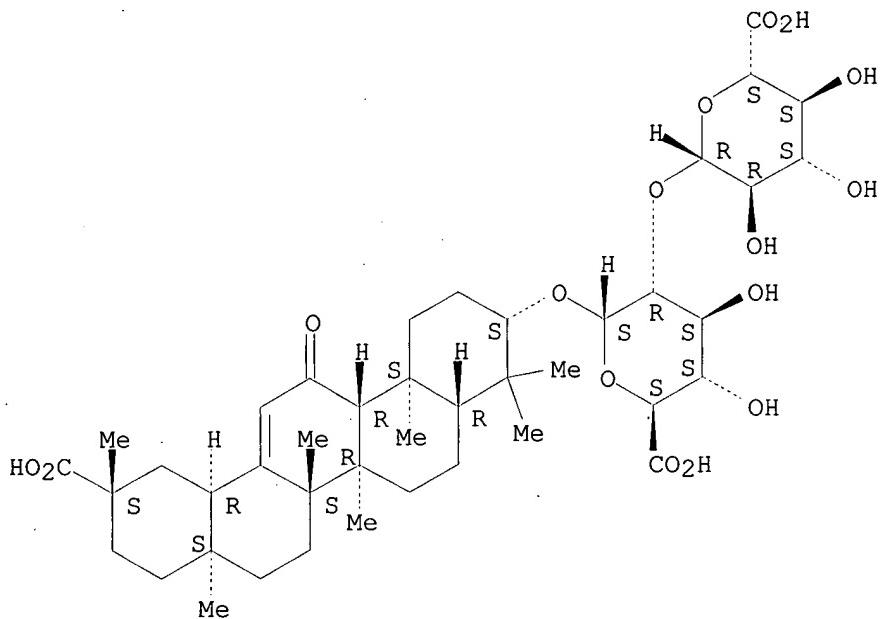
Absolute stereochemistry.



- RN 68797-35-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

L105 ANSWER 29 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2001:133636 HCPLUS

DN 134:168096

TI Use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of the oral cavity

IN Desjonquieres, Stephane

PA Fr.

SO Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-20

ICS A61K031-23; A61P001-02

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1077061	A2	20010221	EP 2000-402276	20000811 <--
	EP 1077061	A3	20010321		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2797584	A1	20010223	FR 1999-10514	19990816 <--

PRAI FR 1999-10514 A 19990816 <--

OS MARPAT 134:168096

AB Peroxidized lipids are used for treating or preventing mucosal wounds and inflammation of the oral cavity by formation of a protective film on the mucosa. A protective buccal gel contained oxidized glycerol triesters 92.7, silica dioxide 7, sodium saccharinate 0.20, and liquorice fragrance 0.10%.

ST peroxidized lipid inflammation oral cavity; mucosa wound peroxidized lipid inflammation

IT Mouth
(aphthous stomatitis; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Essential oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(bitter almond; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Cosmetics
(creams; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Cosmetics
(emulsions; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Cosmetics
(gels; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Gingiva
(gingivitis; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hazelnut; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Lipids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hydroperoxides; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Hydroperoxides
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(lipid; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(raisin seed; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(sesame; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Cosmetics
Gingiva

Inflammation

Mouth

Mucous membrane
(use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Corn oil

Safflower oil

Sunflower oil
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(vegetable; use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

IT 56-81-5D, Glycerol, esters, oxidized 7631-86-9, Silica, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(use of peroxidized lipids for treating or preventing mucosal wounds and inflammation of oral cavity)

L105 ANSWER 30 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:89598 HCAPLUS

DN 134:136480

TI Cosmetics containing **licorice extracts** and carboxyvinyl polymers

IN Yamagishi, Rieko; Onodera, Takao; Takusagawa, Hiroshi

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-48

ICS A61K007-00

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001031555	A2	20010206	JP 1999-209616	19990723
PRAI	JP 1999-209616		19990723		

AB This invention relates to cosmetics comprising **oil-sol exts. of licorice** and alkyl-modified carboxyvinyl polymers. The compns. show a viscosity of 500-10,000 cSt at 25.degree.. The compns. provide improved oil control and prevent shine or grease on the face. A lotion contained **licorice exts.** 0.2, ethanol 5, methylparaben 0.4, propylparaben 0.04, tocopherol acetate 0.15, perfumes 0.05, Pemulen TR-1 0.2, triisopropanolamine 0.2, ethoxylated hydrogenated castor oils 1, 1,3-butylene glycol 5, dipotassium **glycyrrhizinate** 0.1, and water q.s. to 100 %.

ST cosmetic **licorice ext** carboxyvinyl polymer

IT Vinyl compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(carboxy-contg., polymers; cosmetics contg. **licorice exts.** and carboxyvinyl polymers)

IT Cosmetics

(cosmetics contg. **licorice exts.** and carboxyvinyl polymers)

IT **Licorice (Glycyrrhiza uralensis)**

(exts.; cosmetics contg. **licorice exts.** and carboxyvinyl polymers)

IT Cosmetics

(lotions; cosmetics contg. **licorice exts.** and carboxyvinyl polymers)

IT 96827-24-6, Carbopol 1342 138789-85-2, Pemulen TR-1 145687-02-1, Pemulen TR-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(cosmetics contg. **licorice exts.** and carboxyvinyl polymers)

L105 ANSWER 31 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:64003 HCAPLUS

DN 134:120632

TI **Dentifrice** compositions containing **titanium** derived compounds

IN Finidori, Claudine

PA Sanofi-Synthelabo, Fr.

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA French

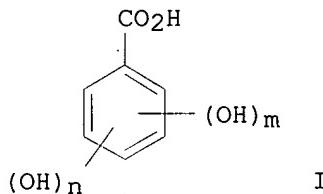
IC ICM C07F007-00

ICS A61K031-00; A61K006-00

CC 62-7 (Essential Oils and Cosmetics)
Section cross-reference(s): 29

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001005797	A1	20010125	WO 2000-FR1994	20000711 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2796383	A1	20010119	FR 1999-9194	19990716 <--
	FR 2796383	B1	20020614		
	BR 2000012475	A	20020402	BR 2000-12475	20000711 <--
	EP 1202996	A1	20020508	EP 2000-949690	20000711 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003513011	T2	20030408	JP 2001-511456	20000711 <--
	NO 2002000156	A	20020315	NO 2002-156	20020111 <--
PRAI	FR 1999-9194	A	19990716 <--		
	WO 2000-FR1994	W	20000711 <--		
OS	MARPAT 134:120632				
GI					



AB The invention concerns compds. derived from titanium of formula $[TiFxLy]^z-$ wherein L represents a compd. of formula I (m is 0 or 1 and n is 0, 1 or 2, and x represents 2, 4 or 5, yr represents 1 or 2 and z represents 0, 1 or 2). The invention also concerns the use of said compds. in compns. for oral use, for preventing dental decay. A soln. of 10 g salicylic acid in 100 mL acetonitrile was stirred with 5 g of titanium fluoride for 24 h. The soln. was cooled, filtered, and concd. at 4.degree. to obtain yellow-orange crystals of salicylate deriv. of titanium fluoride which was sepd., m.p. = 157-160. Formulation of a **dentifrice** contg. above titanium deriv. q.s. 2500 ppm of F is disclosed.

ST **dentifrice** salicylate deriv titanium fluoride

IT Surfactants

(amphoteric; **dentifrice** compns. contg. titanium derived compds.)

IT Surfactants
 (anionic; **dentifrice** compns. contg. titanium derived compds.)

IT **Tooth**
 (caries; **dentifrice** compns. contg. titanium derived compds.)

IT Anti-inflammatory agents
 Antibacterial agents
 Chewing gum
Dentifrices
 Dyes
 Flavor
 Humectants
Mouthwashes
 Plasticizers
 Preservatives
 Thickening agents
 (**dentifrice** compns. contg. titanium derived compds.)

IT Essential oils
 Hydroxides (inorganic)
 Oxides (inorganic), biological studies
 Vitamins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**dentifrice** compns. contg. titanium derived compds.)

IT **Dentifrices**
 (gels; **dentifrice** compns. contg. titanium derived compds.)

IT Surfactants
 (nonionic; **dentifrice** compns. contg. titanium derived compds.)

IT Solvents
 (org.; **dentifrice** compns. contg. titanium derived compds.)

IT Drug delivery systems
 (solns., oral; **dentifrice** compns. contg. titanium derived compds.)

IT Drug delivery systems
 (tablets, buccal; **dentifrice** compns. contg. titanium derived compds.)

IT Transition metal halides
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (zinc halides; **dentifrice** compns. contg. titanium derived compds.)

IT Surfactants
 (zwitterionic; **dentifrice** compns. contg. titanium derived compds.)

IT 50-70-4, Sorbitol, biological studies 55-56-1, Chlorhexidine 57-48-7,
 Fructose, biological studies 57-50-1, Saccharose, biological studies 60-12-8, Phenethyl alcohol 63-42-3, Lactose 69-65-8,
 D Mannitol 69-79-4, Maltose 87-99-0, Xylitol. 97-59-6,
 Allantoin 100-46-9, Benzylamine, biological studies 122-99-6,
 Phenoxyethanol 123-03-5, **Cetylpyridinium chloride** 128-44-9, Sodium saccharinate 139-05-9, Sodium cyclamate 141-94-6, Hexetidine 144-55-8, Sodium bicarbonate, biological studies 471-34-1, Calcium carbonate, biological studies 471-53-4, Enoxolone 471-80-7D, glycosides 497-19-8, Sodium carbonate, biological studies 546-46-3, Zinc citrate 546-93-0, Magnesium carbonate 557-34-6, Zinc acetate 1335-30-4, Aluminum silicate 1344-28-1, Alumina, biological studies 2090-64-4, Magnesium bicarbonate 3380-34-5, Triclosan 3983-19-5, Calcium bicarbonate 7631-86-9, Silica, biological studies 7757-87-1, Trimagnesiumphosphate 7757-93-9, Dicalcium phosphate 7758-87-4,

Tricalcium phosphate 7778-18-9, Calciumsulfate 7783-49-5,
 Zinc fluoride 7790-53-6, Potassium metaphosphate
 9000-07-1, Carrageenan 9000-30-0, Guar gum
 9000-65-1, Tragacanth gum 9000-69-5, Pectins
 9003-01-4D, Polyacrylic acid, crosslinked 9004-32-4, Sodium
 carboxymethyl cellulose 9004-34-6, Cellulose, biological studies
 9004-67-5, Methyl cellulose 9005-32-7, Alginic acid
 10043-83-1, Magnesium orthophosphate 10086-45-0, Calcium pyrophosphate
 10103-46-5, Calcium phosphate 11138-66-2, Xanthan gum
 12619-70-4, Cyclodextrin 14987-04-3, Magnesium trisilicate 19262-94-3,
 Magnesium pyrophosphate 21645-51-2, Hydrated alumina, biological studies
 22573-93-9, Alexidine 22839-47-0, Aspartame 50813-16-6, Sodium
 metaphosphate 53285-61-3, Permethyl 53956-04-0, Ammonium
glycyrrhizinate 55589-62-3, Acesulfame k 56649-78-6,
 Sodium **glycyrrhizinate** 79874-76-3, Delmopinol 129406-46-8,
 Lycosin
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (dentifrice compns. contg. titanium derived compds.)

IT 321546-78-5P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (dentifrice compns. contg. titanium derived compds.)
 IT 75-05-8, Acetonitrile, uses 7727-37-9, Nitrogen, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (dentifrice compns. contg. titanium derived compds.)
 IT 65-85-0, Benzoic acid, reactions 69-72-7, Salicylic acid, reactions
 99-06-9, 3-Hydroxy benzoic acid, reactions 99-50-3, 3,4-Dihydroxy
 benzoic acid 99-96-7, 4-Hydroxy benzoic acid, reactions 303-38-8,
 2,3-Dihydroxy benzoic acid 51142-88-2, Titanium fluoride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (dentifrice compns. contg. titanium derived compds.)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Dean; J CHEM SOC A 1970, 15, P2569 HCPLUS
- (2) Dean; J CHEM SOC A 1970, 15, P2569 HCPLUS

IT 57-50-1, Saccharose, biological studies 63-42-3, Lactose
 69-79-4, Maltose 123-03-5, **Cetylpyridinium**
chloride 471-53-4, Enoxolone 546-46-3,
 Zinc citrate 557-34-6, Zinc acetate
 7783-49-5, Zinc fluoride 9000-07-1,
 Carrageenan 9000-30-0, Guar gum 9000-65-1, Tragacanth
 gum 9000-69-5, Pectins 9004-32-4, Sodium carboxymethyl
 cellulose 9004-34-6, Cellulose, biological studies
 9004-67-5, Methyl cellulose 9005-32-7, Alginic acid
 11138-66-2, Xanthan gum 53956-04-0, Ammonium
glycyrrhizinate 56649-78-6, Sodium
glycyrrhizinate

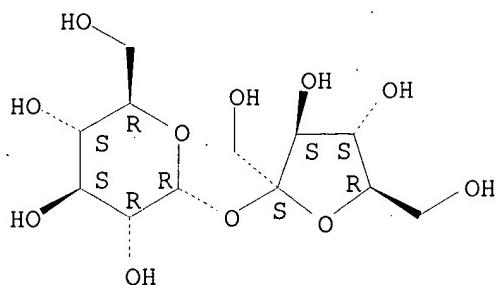
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(dentifrice compns. contg. titanium derived compds.)

RN 57-50-1 HCPLUS

CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

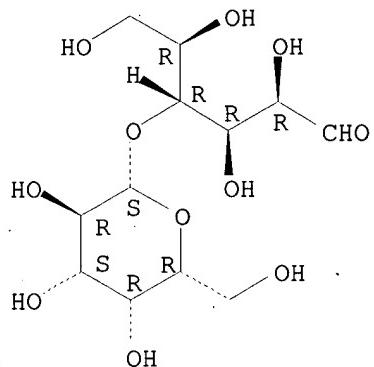
Absolute stereochemistry.



RN 63-42-3 HCPLUS

CN D-Glucose, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

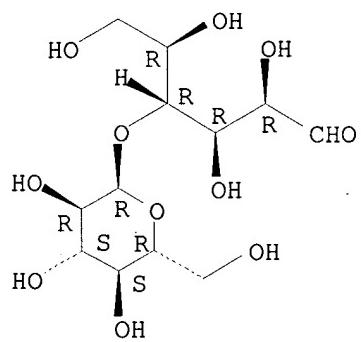
Absolute stereochemistry. Rotation (+).



RN 69-79-4 HCPLUS

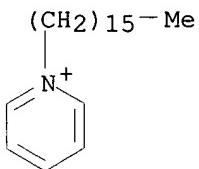
CN D-Glucose, 4-O-.alpha.-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123-03-5 HCPLUS

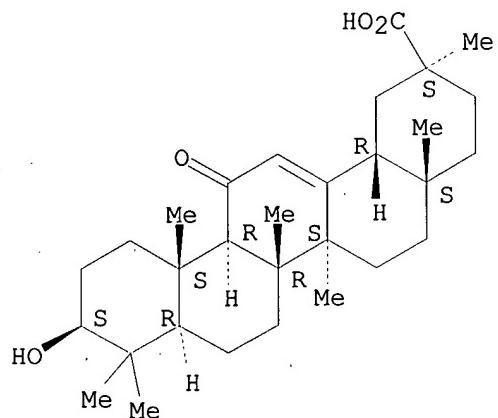
CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



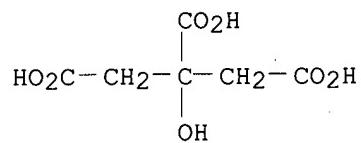
● Cl⁻

RN 471-53-4 HCAPLUS
 CN Ólean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.β.,20.β.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

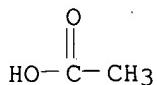


RN 546-46-3 HCAPLUS
 CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)



● 3/2 Zn

RN 557-34-6 HCAPLUS
 CN Acetic acid, zinc salt (8CI, 9CI) (CA INDEX NAME)



1/2 Zn

RN 7783-49-5 HCPLUS
 CN Zinc fluoride (ZnF₂) (9CI) (CA INDEX NAME)

F-Zn-F

RN 9000-07-1 HCPLUS
 CN Carrageenan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-30-0 HCPLUS
 CN Guar gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-65-1 HCPLUS
 CN Gum tragacanth (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-69-5 HCPLUS
 CN Pectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-32-4 HCPLUS
 CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

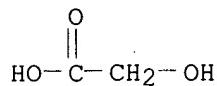
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
 CMF C₂ H₄ O₃



RN 9004-34-6 HCPLUS
 CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-67-5 HCPLUS
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
 CMF C H4 O

H₃C—OH

RN 9005-32-7 HCPLUS
 CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

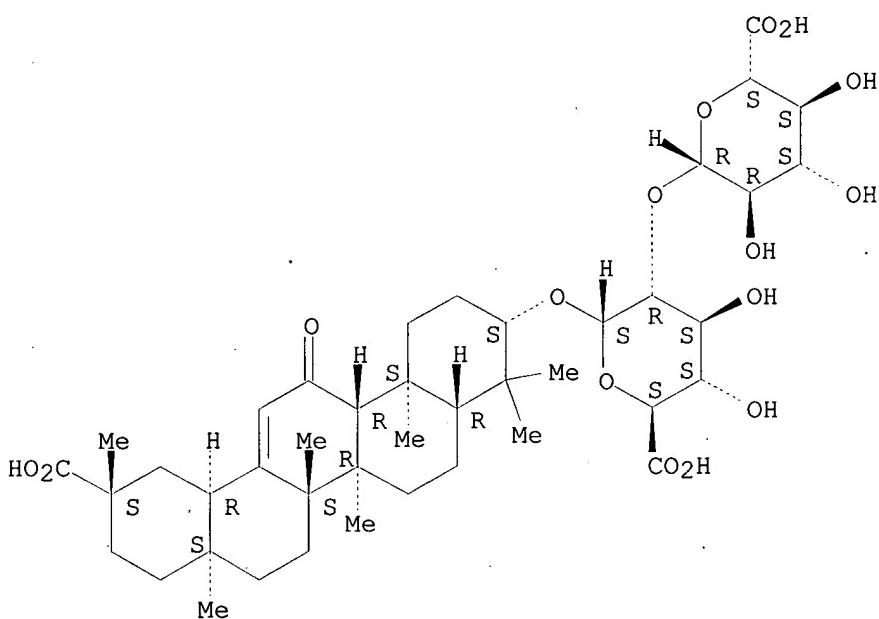
RN 11138-66-2 HCPLUS
 CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 53956-04-0 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

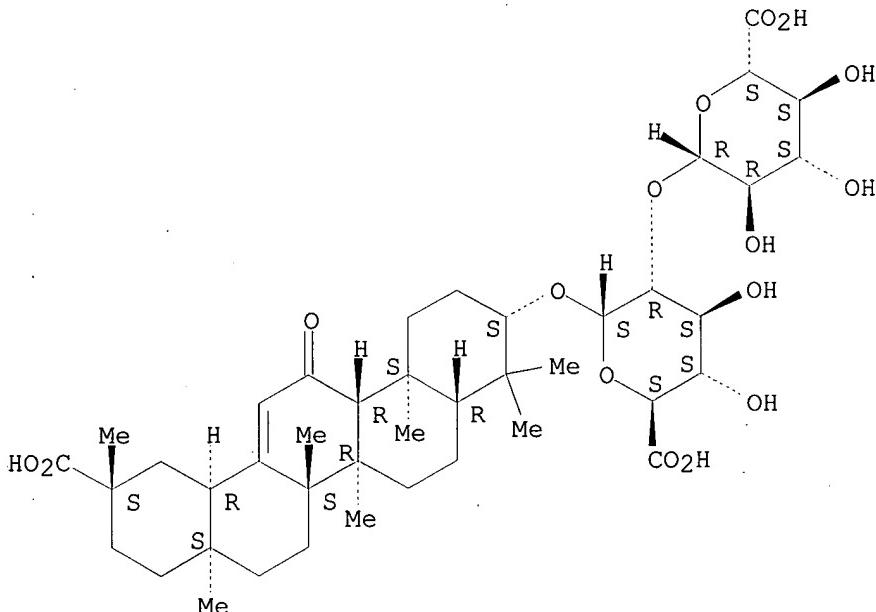
NH₃

RN 56649-78-6 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● x Na

L105 ANSWER 32 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:765372 HCAPLUS

DN 133:325518

TI Manufacture of **dentifrices** containing **seamless** capsules without drying

IN Oshino, Kazushi; Maeda, Koji; Yoshida, Hidenori

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000302654	A2	20001031	JP 1999-109767	19990416 <--
PRAI	JP 1999-109767		19990416 <--		

AB **Dentifrices** are manufd. by adding undried seamless capsules. Contents of the capsules added in the undried state are storage stable and rapidly released upon breaking of capsules by brushing. Seamless capsules

(particle size 1 mm) contg. Coconard MT (mixed triglycerides contg. caprylic acid and capric acid), .beta.-**glycyrrhetic acid**, and EtOH in capsule wall comprising gelatin and Na alginate were manufd. using a double-nozzle drop method. The capsules were soaked in an aq. CaCl₂ soln. and, without drying, are added to a dentifrice compn.

ST dentifrice brushing breakable undried seamless capsule; **glycyrrhetic acid** seamless gelatin capsule undried dentifrice

IT Drug delivery systems
(capsules; manuf. of **dentifrices** contg. seamless capsules without drying to make breaking upon brushing easy)

IT **Dentifrices**
(manuf. of **dentifrices** contg. seamless capsules without drying to make breaking upon brushing easy)

IT Gelatins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manuf. of **dentifrices** contg. seamless capsules without drying to make breaking upon brushing easy)

IT 1449-05-4, .beta.-**Glycyrrhetic acid**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(capsule content; manuf. of **dentifrices** contg. seamless capsules without drying to make breaking upon brushing easy)

IT 9005-38-3, Sodium alginate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manuf. of **dentifrices** contg. seamless capsules without drying to make breaking upon brushing easy)

IT 9005-38-3, Sodium alginate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manuf. of **dentifrices** contg. seamless capsules without drying to make breaking upon brushing easy)

RN 9005-38-3 HCPLUS

CN Alginic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 33 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2000:585379 HCPLUS

DN 133:182797

TI **Dentifrices** containing antiinflammatory agents and erythritol

IN Maruyama, Masatatsu; Kobayashi, Toshiaki; Nishinaga, Eiji

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000229823	A2	20000822	JP 1999-28100	19990205 <--
PRAI	JP 1999-28100		19990205 <--		

AB The **dentifrices** show enhanced antiinflammatory effect and prevent periodontal diseases. A **dentifrice** contg. 0.05% tranexamic acid and 10% erythritol significantly suppressed **Streptococcus mutans**-induced **gingivitis** in hamsters.

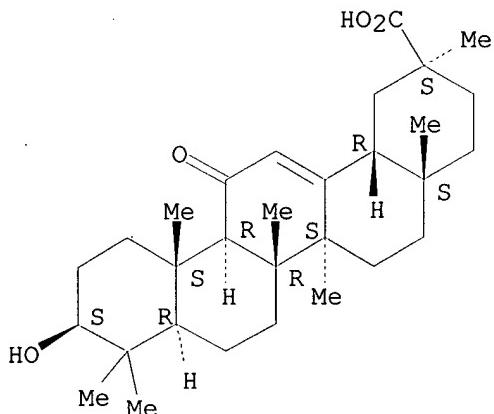
ST dentifrice inflammation inhibitor erythritol enhancer

IT **Dentifrices**

Dentifrices
(chewing gums; **dentifrices** contg. antiinflammatory agents and

- erythritol to enhance the activity)
- IT Anti-inflammatory agents
Dentifrices
Mouthwashes
 (dentifrices contg. antiinflammatory agents and erythritol to enhance the activity)
- IT Chewing gum
 Chewing gum
 (dentifrices; dentifrices contg. antiinflammatory agents and erythritol to enhance the activity)
- IT 149-32-6, Erythritol 1197-18-8, Tranexamic acid
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dentifrices contg. antiinflammatory agents and erythritol to enhance the activity)
- IT 60-32-2, .epsilon.-Aminocaproic acid 275-51-4, Azulene 471-53-4
 , Glycyrrhetic acid 1317-25-5, Aluminum chlorohydroxyallantoate
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dentifrices contg. antiinflammatory agents and erythritol to enhance the activity)
- IT 471-53-4, Glycyrrhetic acid
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dentifrices contg. antiinflammatory agents and erythritol to enhance the activity)
- RN 471-53-4 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 34 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2000:227469 HCPLUS

DN 132:241719

TI Dentifrices containing bactericides and auxiliary agents for prevention of periodontal diseases

IN Kayane, Shigeto; Yanou, Yoshitaka; Fujinaka, Hidetake; Yoshida, Hidenori; Murakami, Yoshinori; Suzuki, Akira; Maeda, Kouji

PA Kao Corporation, Japan

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA Japanese
 IC ICM A61K007-16
 ICS A46B009-04; A61C017-00
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000018364	A1	20000406	WO 1999-JP4935	19990910 <--
	W: CN, SG, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 2000186023	A2	20000704	JP 1998-362263	19981221 <--
	JP 2000159648	A2	20000613	JP 1999-217180	19990730 <--
	EP 1123696	A1	20010816	EP 1999-943267	19990910 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6475470	B1	20021105	US 2001-787408	20010321 <--
PRAI	JP 1998-271721	A	19980925	<--	
	JP 1998-362263	A	19981221	<--	
	WO 1999-JP4935	W	19990910	<--	

AB **Dentifrices** comprises (A) an agent having a drug effect or a bactericide acting on the **periodontium** and (B) an exothermic substance or a water-sol. polymer and has a moisture content of 5 % by wt. or less. In these compns., the agent with the drug effect, etc. can be adsorbed by the mouth mucosa at a high efficiency thereby achieving excellent effects of preventing/treating **periodontal** diseases.
 A **dentifrice** contained dl-.alpha.-tocopherol acetate 0.1, .beta.-**glycyrrhetic acid** 0.01, benzethonium chloride 0.01, zeolite 20, magnesium sulfate 5, xanthan gum 0.5, CaHPO4 10, glycerin 32, propylene glycol 25.18, silica 5, Na lauryl sulfate 1, Na saccharin 0.2, and flavors 1 %.

ST **dentifrice** bactericide exothermic agent **periodontal** disease

IT Antibacterial agents

Dentifrices

(**dentifrices** contg. bactericides and auxiliary agents for prevention of **periodontal** diseases)

IT Alkaline earth salts

Zeolites (synthetic), biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**dentifrices** contg. bactericides and auxiliary agents for prevention of **periodontal** diseases)

IT **Periodontium**

(disease; **dentifrices** contg. bactericides and auxiliary agents for prevention of **periodontal** diseases)

IT Materials

(exothermic; **dentifrices** contg. bactericides and auxiliary agents for prevention of **periodontal** diseases)

IT Brushes

Brushes

Dental materials and appliances

Dental materials and appliances

(toothbrushes; toothbrushes and bactericide-contg. **dentifrices** for prevention of **periodontal** diseases)

IT 97-59-6, Allantoin 121-54-0, Benzethonium chloride 123-03-5,

Cetylpyridinium chloride 299-28-5, Calcium gluconate

471-34-1, Calcium carbonate, biological studies 1309-42-8, Magnesium

hydroxide 1406-18-4, Vitamin E 1449-05-4, .beta.-

Glycyrrhetic acid 3380-34-5, Triclosan 7487-88-9,

Magnesium sulfate, biological studies 7757-93-9, Calcium hydrogen

phosphate 9000-07-1, Carrageenan 9004-53-9, Dextrin

9004-64-2, Hydroxypropyl cellulose 11138-66-2, Xanthan
 gum 50813-16-6, Sodium metaphosphate 51898-34-1, dl-.alpha.-Tocopherol
 nicotinate 52225-20-4, dl-.alpha.-Tocopherol acetate
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(dentifrices contg. bactericides and auxiliary agents for
 prevention of periodontal diseases)

IT 123-03-5, Cetylpyridinium chloride

9000-07-1, Carrageenan 9004-53-9, Dextrin

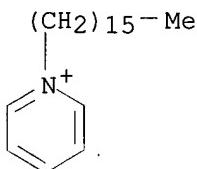
9004-64-2, Hydroxypropyl cellulose 11138-66-2, Xanthan
 gum

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(dentifrices contg. bactericides and auxiliary agents for
 prevention of periodontal diseases)

RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl-

RN 9000-07-1 HCPLUS

CN Carrageenan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-53-9 HCPLUS

CN Dextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-64-2 HCPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

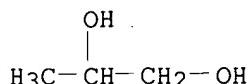
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6

CMF C3 H8 O2



RN 11138-66-2 HCPLUS

CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

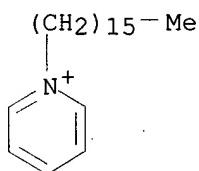
L105 ANSWER 35 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 2000:137236 HCPLUS
 DN 132:185430
 TI Buccal tablets for the treatment of **periodontal** diseases
 IN Kojima, Nobuo
 PA Lion Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K009-70
 ICS A61K007-16; A61K009-20; A61P001-02; A61K031-7004; A61K047-10
 CC 63-6 (Pharmaceuticals)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000063268	A2	20000229	JP 1998-341039	19981113 <--
PRAI JP 1998-181606		19980612 <--		

AB Sustained-release tablets comprising a buccal adhesive layer and a nonadhesive layer, contain xylitol and/or erythritol. The tablets further contain antimicrobial agents and used for the treatment of **periodontal** diseases. A tablet comprised (1) an adhesive layer contg. xylitol 70, **cetylpyridinium chloride** 0.05, flavors 1.95, and Na polyacrylate 28 % and (2) a nonadhesive layer contg. xylitol 70, **cetylpyridinium chloride** 0.05, flavors 1.95, and PVP 28 %.

ST buccal tablet xylitol erythritol
 IT Heart, disease
 (angina pectoris; buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT **Periodontium**
 (disease; buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT **Gingiva**
 (gingivitis; buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT **Periodontium**
 (periodontitis; buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT Pharynx
 (pharyngitis; buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT Drug delivery systems
 (tablets, buccal; buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT 76-25-5, Triamcinoloneacetonide 87-33-2, Isosorbide dinitrate 87-99-0, Xylitol 113-92-8, Chlorpheniramine maleate 123-03-5, **Cetylpyridinium chloride** 149-32-6, Erythritol 499-44-5, Hinokitiol 9066-59-5, Lysozyme chloride 23327-65-3, Dipotassium glycyrrhetinate 115905-40-3, Decalinium chloride RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 IT 123-03-5, **Cetylpyridinium chloride**
 23327-65-3, Dipotassium glycyrrhetinate
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (buccal tablets contg. xylitol and erythritol and antimicrobials for treatment of **periodontal** diseases)
 RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)

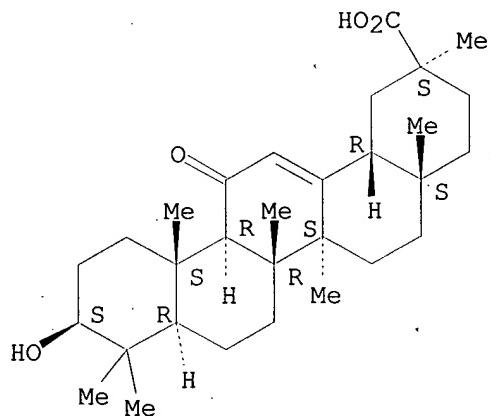


● Cl⁻

RN 23327-65-3 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, dipotassium salt,
(3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 K

L105 ANSWER 36 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 2000:62589 HCPLUS

DN 132:112780

TI Dentifrices containing sweet base and
menthol compounds

IN Takahashi, Hirokazu

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000026257	A2	20000125	JP 1998-193234	19980708 <--
PRAI	JP 1998-193234		19980708 <--		
AB	Dentifrices which do not leave heavy sweet aftertaste comprise				

(1) a base with sweet taste and (2) l-menthol or its esters. A **mouthwash** contained ethanol 15, sorbitol 10, Na saccharin 0.2, licorice exts. 0.1, l-menthol lactate 2, ethoxylated hydrogenated castor oil 1, Na benzoate 0.1, methylparaben 0.1, NaH₂PO₄ 0.1, flavors 0.5, colors, and water q.s. to 100 %.

ST **dentifrice** menthol ester sweet base

IT **Dentifrices**

Mouthwashes

Stevia

(**dentifrices** contg. sweet base and menthol compds.)

IT **Fructooligosaccharides**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**dentifrices** contg. sweet base and menthol compds.)

IT **Natural products, pharmaceutical**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**licorice; dentifrices** contg. sweet base and menthol compds.)

IT 50-70-4, D-Glucitol, biological studies 56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6, 1,2-Propanediol, biological studies 58-86-6, D-Xylose, biological studies 87-99-0, Xylitol 89-46-3, Menthyl salicylate 128-44-9, Sodium saccharin **1405-86-3**, Glycyrrhizin 2216-51-5 2623-23-6 22839-47-0, Aspartame 57084-14-7 **68797-35-3**, Glycyrrhizin dipotassium salt 77341-67-4 110610-85-0 255862-33-0

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**dentifrices** contg. sweet base and menthol compds.)

IT **1405-86-3, Glycyrrhizin 68797-35-3,**

Glycyrrhizin dipotassium salt

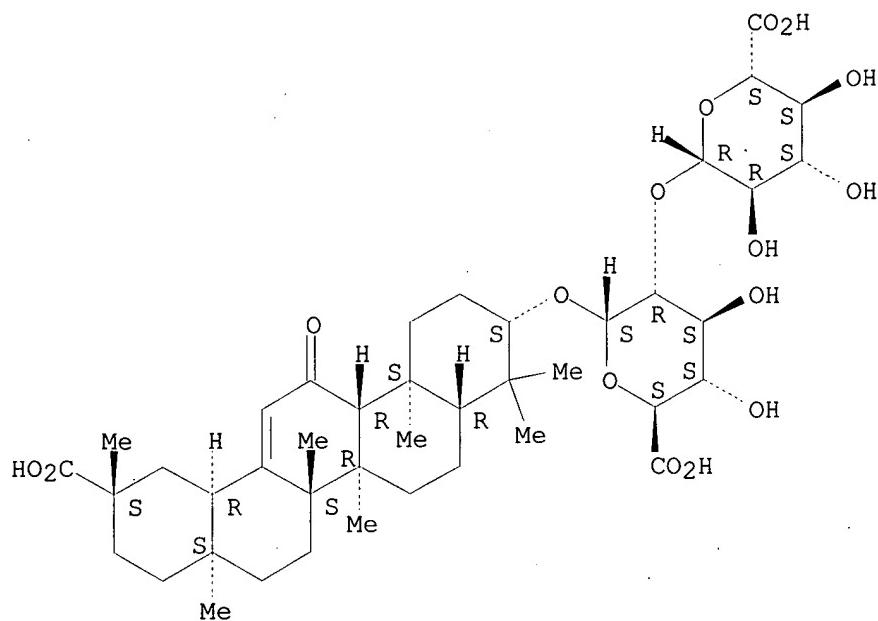
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**dentifrices** contg. sweet base and menthol compds.)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-. β .-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

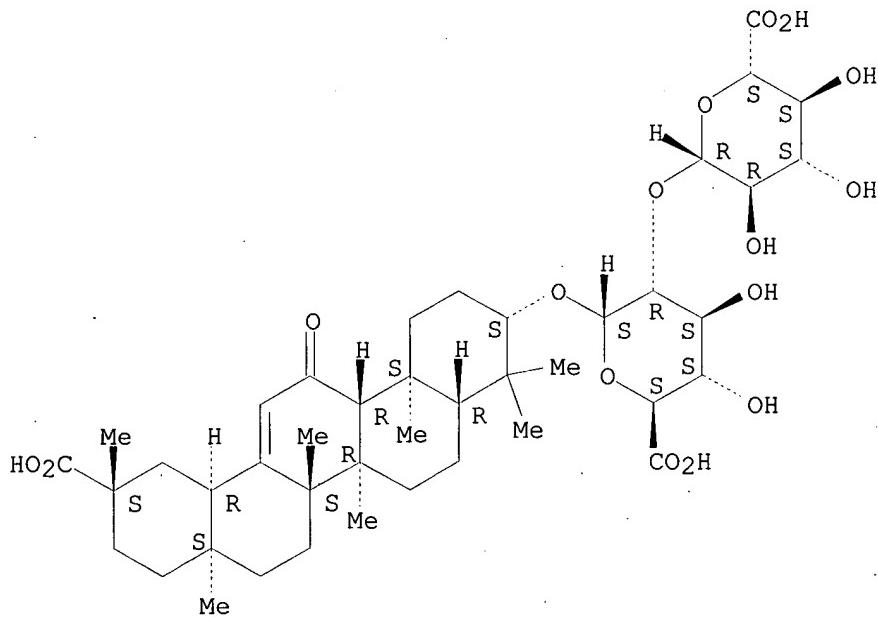


RN 68797-35-3 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

●2 K

L105 ANSWER 37 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1999:772538 HCPLUS

DN 132:15501

TI **Dentifrice** compositions containing medicinal components, N-acyl amino acid esters, and nonionic surfactants

IN Kamimura, Hirohisa; Yamazaki, Hajime; Kato, Kazuhiko

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11335253	A2	19991207	JP 1998-145526	19980527 <--
PRAI	JP 1998-145526		19980527 <--		

AB The compns., which show improved adsorption on **gingiva**, are microemulsions (median diam. ltoreq. 0.1 .mu.m) contg. **water-insol.** medicinal components, N-.alpha.-acyl basic amino acid alkyl esters or their salts, nonionic surfactants, and H₂O. A microemulsion was prep'd. from fragrance-vitamin E mixt. 0.30, EtOH 0.40, Rheodol TWS (polyoxyethylene sorbitan monostearate) 0.40, CAE (N-.alpha.-coco fatty acyl-L-arginine Et ester D,L-pyrrolidonecarboxylic acid salt) 0.01, methylparaben 0.05, and H₂O 98.84 wt. parts.

ST **dentifrice** acyl amino acid ester; nonionic surfactant
dentifrice vitamin E; arginine coco acyl pyrrolidonecarboxylate
dentifrice

IT Amino acids, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(N-acyl; **dentifrices** contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

IT **Dentifrices****Mouthwashes**

(**dentifrices** contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

IT Horse chestnut (Aesculus)

(exts.; **dentifrices** contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

IT Polyoxyalkylenes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hydrogenated castor oil derivs.; **dentifrices** contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

IT Castor oil

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hydrogenated, ethoxylated; **dentifrices** contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

IT Surfactants

(nonionic; **dentifrices** contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

IT 74-79-3D, Arginine, N-coco acyl derivs., Et esters, pyrrolidonecarboxylate

salts 1406-18-4, Vitamin E 1449-05-4, .beta.-**Glycyrrhetic acid** 9005-67-8, Rheodol TWS 120 25322-68-3D, hydrogenated castor oil derivs. 52225-20-4, dl-.alpha.-Tocopherol acetate 149779-14-6, CAE
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (dentifrices contg. medicinal components, N-acyl amino acid esters, and nonionic surfactants)

L105 ANSWER 38 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:576732 HCAPLUS

DN 131:184278

TI Food for preventing **periodontosis**

IN Murashima, Miwako

PA Sunstar Inc., Japan

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A23L001-304

ICS A23L001-302; A61K035-78; A61K031-19; A61K031-66

CC 17-14 (Food and Feed Chemistry)

Section cross-reference(s): 5

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9944440	A1	19990910	WO 1999-JP981	19990301 <--
	W: CA, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 11243910	A2	19990914	JP 1998-52355	19980304 <--
PRAI	JP 1998-52355		19980304 <--		
AB	Food contg. antibacterial plant exts. and a highly sol. calcium salt prevents periodontosis . The useful plant exts. are licorice exts. soybean isoflavone, and tea polyphenols. Sol. Ca salts are Ca gluconate and Ca lactate.				
ST	food periodontosis plant ext calcium gluconate lactate				
IT	Licorice (Glycyrrhiza)				
	Soybean (Glycine max)				
	Tea (Camellia sinensis)				
	(food contg. plant exts. and calcium salts for preventing periodontosis)				
IT	Food				
	(for preventing periodontosis)				
IT	Periodontium				
	(periodontosis ; food for preventing periodontosis)				
IT	299-28-5, Calcium gluconate 814-80-2, Calcium lactate				
	RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)				
	(food contg. plant exts. and calcium salts for preventing periodontosis)				

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Director General of National Food Research Institute; JP 09-107918 A 1997 HCAPLUS
- (2) Food Design Gijutsu Kenkyu Kumiai; JP 05-23153 A 1993
- (3) Fujimi Green Engineering KK; JP 05-276873 A 1993 HCAPLUS
- (4) KK Advance; JP 10-108648 A 1998 HCAPLUS
- (5) Kanebo Ltd; JP 07-309733 A 1995
- (6) Kikkoman Corp; JP 04-283518 A 1992 HCAPLUS
- (7) Lion Corp; JP 09-143042 A 1997 HCAPLUS
- (8) Nissui Pharmaceutical Co Ltd; JP 08-81367 A 1996 HCAPLUS
- (9) Sunstar Inc; JP 63-179823 A 1988 HCAPLUS
- (10) Suntory Ltd; JP 08-81380 A 1996 HCAPLUS

(11) Taiyo Kagaku Co Ltd; JP 05-944 A 1993 HCPLUS

- L105 ANSWER 39 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1999:386458 HCPLUS
 DN 131:209083
 TI The effect of xylitol and chlorhexidine acetate/xylitol chewing gums on plaque accumulation and gingival inflammation
 AU Simons, D.; Beighton, D.; Kidd, E. A. M.; Collier, F. I.
 CS West Hertfordshire Community Dental Service, Principal Health Centre, Herts, UK
 SO Journal of Clinical Periodontology (1999), 26(6), 388-391
 CODEN: JCPEDZ; ISSN: 0303-6979
 PB Munksgaard International Publishers Ltd.
 DT Journal
 LA English
 CC 1-12 (Pharmacology)
 AB Chewing gums may be suitable vehicles for the delivery of xylitol (X) and chlorhexidine acetate (CHX), both of which can aid oral health. The aim of this study was to det. the clin. effectiveness of chewing gums contg. X or a combination of X and CHX in a double-blind, randomized, cross over, 5-day clin. trial, with a 9-day washout period in a group of participants over 40 yr old. After professional tooth cleaning, 8 subjects (mean age 51.3+-10.4 yr) used in a random order 2 pieces of ACHX (a liquorice flavored CHX/X) gum, 2 pieces of BCHX (a chocolate mint flavored CHX/X), 2 pieces of X (a liquorice flavored X gum) and 1 piece of ACHX. Gums were chewed 2 times. daily for 15 min and volunteers refrained from all other oral hygiene procedures. Data were analyzed using Friedman nonparametric anal. of variance. Plaque indexes for chewing 2 pieces of ACHX gum (0.78+-0.15) and BCHX gum (0.52+-0.15) were significantly lower ($p<0.0006$) than for X gum (1.57+-0.08). The gingival index was significantly greater ($p<0.05$) for X contg. gum than for the other chewing regimes. The subjects' attitudes to the gums were also assessed by structured questionnaires which showed that all gums were easy to chew, did not adhere to dentures, teeth or restorations and that the subjects preferred to chew 2 pellets rather than 1.
 ST xylitol chlorhexidine chewing gum plaque gingivitis
 IT Chewing gum
 (effect of xylitol and chlorhexidine acetate/xylitol chewing gums on plaque accumulation and gingival inflammation in humans)
 IT Gingiva
 (gingivitis; effect of xylitol and chlorhexidine acetate/xylitol chewing gums on plaque accumulation and gingival inflammation in humans)
 IT Tooth
 (plaque; effect of xylitol and chlorhexidine acetate/xylitol chewing gums on plaque accumulation and gingival inflammation in humans)
 IT 56-95-1, Chlorhexidine acetate 87-99-0, Xylitol
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effect of xylitol and chlorhexidine acetate/xylitol chewing gums on plaque accumulation and gingival inflammation in humans)
- RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Addy, M; Journal of Clinical Periodontology 1982, V14, P346
 (2) Addy, M; Journal of Clinical Periodontology 1986, V13, P957 HCPLUS
 (3) Ainamo, J; Journal of Clinical Periodontology 1987, V14, P524 MEDLINE
 (4) Ainamo, J; Journal of Clinical Periodontology 1990, V17, P729 HCPLUS
 (5) Axelsson, P; Journal of Clinical Periodontology 1987, V14, P205 MEDLINE

- (6) Burtner, A; Special Care in Dentistry 1996, V16, P53 MEDLINE
 (7) Clark, D; Special Care in Dentistry 1991, V11, P101 MEDLINE
 (8) Cronin, M; Journal of Clinical Dentistry 1994, V5, P106 MEDLINE
 (9) Cumming, B; Journal of Periodontal Research 1973, V8, P57 HCAPLUS
 (10) Flotra, L; Scandinavian Journal of Dental Research 1971, V79, P119 HCAPLUS
 (11) Francis, J; Journal of Periodontology 1987, V58, P456 MEDLINE
 (12) Jenkins, S; Journal of clinical Periodontology 1994, V21, P250 MEDLINE
 (13) Likert, R; A technique for the measuring of attitudes 1932
 (14) Lobene, R; Journal of American Dental Association 1968, V77, P849 MEDLINE
 (15) Loe, H; Journal of Periodontology 1967, V38, P610
 (16) Prayitno, S; Journal of Periodontal Research 1979, V14, P397 MEDLINE
 (17) Risheim, H; Scandinavian Journal of Dental Research 1992, V100, P172
 MEDLINE
 (18) Schiott, C; Journal of Periodontal Research 1976, V11, P158
 (19) Silness, J; Acta Odontologica Scandinavia 1964, V22, P121 MEDLINE
 (20) Simons, D; Caries Research 1997, V31, P91 HCAPLUS
 (21) Smith, A; Journal of Clinical Periodontology 1996, V23, P19 HCAPLUS
 (22) Steinberg, L; Clinical Preventive Dentistry 1992, V14, P31 MEDLINE
 (23) Tellefsen, G; Journal of Periodontology 1996, V67, P181 HCAPLUS
 (24) WHO; Basic Methods 3rd editions 1987

L105 ANSWER 40 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:350530 HCAPLUS

DN 131:35671

TI **Anticaries mouthwashes containing shellac**

IN Sekawa, Hiroyuki; Kataoka, Masaru; Naito, Junko

PA Earth Chemical Co., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11147814	A2	19990602	JP 1998-258826	19980911 <--
PRAI	JP 1997-247025		19970911 <--		

AB **Mouthwashes** comprising shellac dissolved in solvents, mainly water, protect the tooth surface from dental **caries** -causing acids. The **mouthwash** compn. may further contain cationic bactericides, anti-inflammatories, and chelating agents. An **anti-caries mouthwash** contained shellac 0.2, benzethonium chloride 0.01, glycerin 10; polyoxyethylene-polyoxypropylene block copolymer 0.2, NaOH 0.02, NaHCO₃ 0.5, di-Na EDTA 0.02 g, ethanol 5 mL, flavors 0.1 g, colorants q.s., and distd. water q.s. to 100 mL.

ST **anticaries mouthwash shellac**

IT Antibacterial agents

Chelating agents

(**anticaries mouthwashes** contg. shellac and bactericides and chelating agents)

IT Shellac

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**anticaries mouthwashes** contg. shellac and bactericides and chelating agents)

IT **Mouthwashes**

(**anticariogenic; anticaries mouthwashes** contg. shellac and bactericides and chelating agents)

IT 60-00-4, EDTA, biological studies 83-86-3, Phytic acid 121-54-0, Benzethonium chloride 123-03-5, **Cetylpyridinium chloride** 139-33-3, Disodium EDTA 3380-34-5 7722-88-5 7758-29-4, Sodium tripolyphosphate 68039-19-0, Potassium

glycyrrhizinate

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(anticaries mouthwashes contg. shellac and
bactericides and chelating agents)

IT 123-03-5, **Cetylpyridinium chloride**

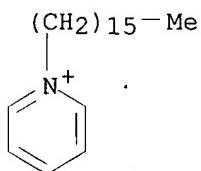
68039-19-0, Potassium **glycyrrhizinate**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(anticaries mouthwashes contg. shellac and
bactericides and chelating agents)

RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



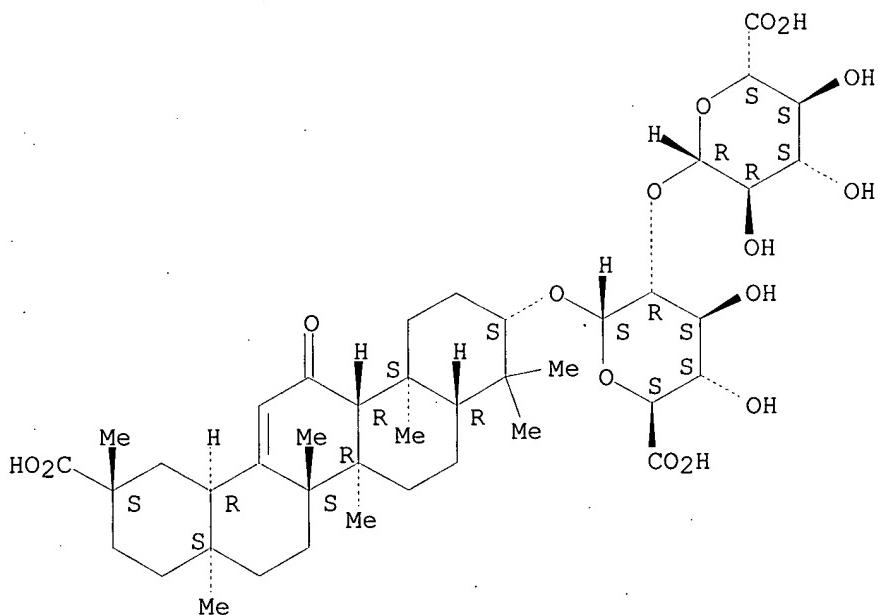
● Cl⁻

RN 68039-19-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, potassium salt
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

x K

L105 ANSWER 41 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1999:285986 HCPLUS

DN 130:329051

TI **Dental products** to treat and prevent
periodontal disease

IN Cutler, Edward T.

PA Squigle, Inc., USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-16

ICS A61K007-18; A61K009-68; A61K009-20

NCL 424049000

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5900230	A	19990504	US 1997-912502	19970818 <--
PRAI	US 1997-912502		19970818 <--		

AB The **dental products** of this invention can be used to treat and prevent **periodontal** disease. They contain a synergistic mixt. of poloxamers, and/or poloxamer congeners, plus xylitol. These active ingredients are present in specific amts. It is also necessary to eliminate all irritants from the **dental products** of this invention. The **dental products** of this invention include **dentifrices**, powders, granules, disintegrable tablets, and **mouthwashes**, lozenges, and chewing gums. A **mouthwash** for the prevention of **periodontal** disease contained water 65.49, xylitol 32.1, Pluronic F127 1, cellulose gum (Aqualon 7MF) 0.24, Methocel K15M Premium 0.12, flavors 0.9, preservatives 0.1, and NaF 0.05 %.

ST **dentifrice periodontal** disease xylitol poloxamer surfactant

IT **Dentifrices**

Dentifrices
(chewing gums; irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT Chewing gum
Chewing gum

(**dentifrices**; irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT Beeswax

Licorice (Glycyrrhiza)

Mouthwashes

Stevia

(irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT Polyoxyalkylenes, biological studies

Talin

Thaumatins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT **Dentifrices**

(lozenges; irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT **Dentifrices**

(tablets; irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT Fats and Glyceridic oils, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(vegetable, hydrogenated; irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

IT 50-70-4, Sorbitol;, biological studies 50-81-7, Ascorbic acid, biological studies 56-81-5, 1,2,3-Propanetriol, biological studies 59-02-9, .alpha.-Tocopherol 60-00-4, Ethylenediaminetetraacetic acid, biological studies 69-65-8, Mannitol 73-31-4, Melatonin; 77-92-9, Citric acid, biological studies 81-07-2, Saccharin 87-99-0, Xylitol; 303-98-0, Coenzyme Q10 471-34-1, Calcium carbonate, biological studies 557-04-0, Magnesium stearate 1083-30-3, Dihydrochalcone 1306-05-4, Fluorapatite (Ca5F(PO4)3) 1306-06-5, Hydroxyapatite; 1344-28-1, Alumina, biological studies **1405-86-3, Glycyrrhizin**
 1592-23-0, Calcium stearate 4075-81-4, Calcium propionate 7235-40-7, .beta.-Carotene 7631-86-9, Silica, biological studies 7631-97-2, Sodium monofluorophosphate 7664-93-9, Sulfuric acid, biological studies 7681-49-4, Sodium fluoride, biological studies 7757-93-9, Dibasic calcium phosphate 7758-87-4, Tribasic calcium phosphate 7790-76-3, Calcium pyrophosphate 9000-01-5, Gum arabic **9000-07-1**, Carrageenan **9000-36-6**, Karaya gum **9000-65-1**, Gum tragacanth **9000-69-5**, Pectin 9003-39-8, Polyvinylpyrrolidone. **9004-32-4 9004-34-6**, Cellulose, biological studies **9004-57-3**, Ethyl cellulose **9004-62-0**, Hydroxyethyl cellulose **9004-64-2**, Hydroxypropyl cellulose **9004-65-3**, Hydroxypropylmethyl cellulose **9004-67-5**, Methyl cellulose **9005-32-7**, Alginic acid **11138-66-2**, Xanthan gum 13463-67-7, Titania, biological studies 22839-47-0, Aspartame 24634-61-5, Potassium sorbate 25322-68-3 33665-90-6, Acesulfame 56038-13-2, Sucralose 106392-12-5, Ethylene oxide-propylene oxide block copolymer 107120-02-5 110617-70-4, Poloxamine
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(irritant-free **dental compns.** for treatment of **periodontal** diseases contg. poloxamer surfactants and xylitol)

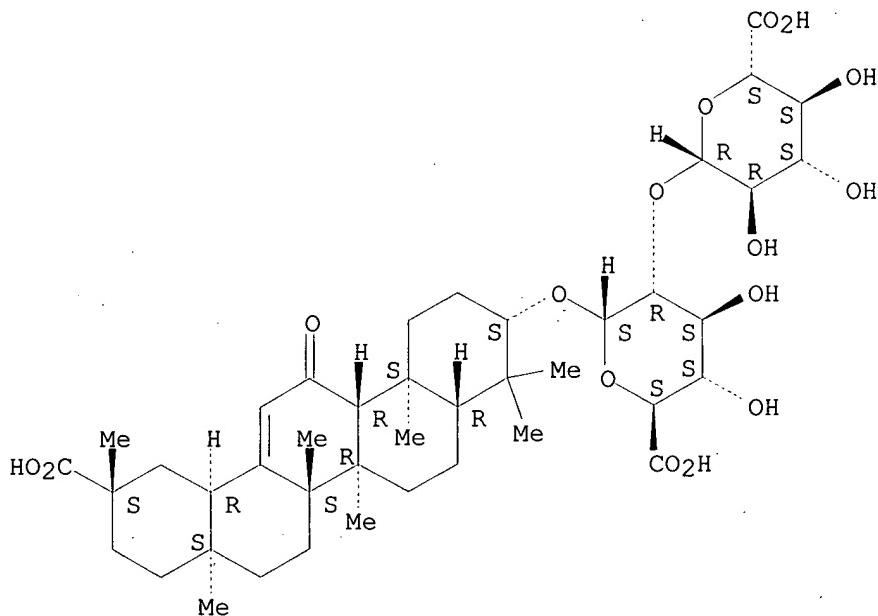
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; DE 2606533 1976 HCPLUS
- (2) Anon; ZA 760735 1976
- (3) Anon; EP 138705 1985 HCPLUS
- (4) Anon; EP 251146 1988 HCPLUS
- (5) Anon; CA 1250807 1989 HCPLUS
- (6) Anon; EP 405682 1990 HCPLUS
- (7) Barth; US 3932604 1976 HCPLUS
- (8) Barth; US 3970747 1976 HCPLUS
- (9) Bleeg, H; Scand J Dent Res 1990, V98, P235 HCPLUS
- (10) Cutler; US 5496541 1996 HCPLUS
- (11) Domke; US 5376360 1994 HCPLUS
- (12) Ebine; US 5178869 1993 HCPLUS
- (13) Fine; US 31954 1985 HCPLUS
- (14) Gaffar; US 5089255 1992 HCPLUS
- (15) Gaffar; US 5531982 1996 HCPLUS
- (16) Herlofson, B; Acta Odontol Scand 1994, V52, P257 MEDLINE
- (17) Prencipe; US 5256402 1993 HCPLUS

- (18) Prencipe; US 5424059 1995 HCPLUS
 IT 1405-86-3, Glycyrrhizin 9000-07-1, Carrageenan
 9000-36-6, Karaya gum 9000-65-1, Gum tragacanth
 9000-69-5, Pectin 9004-32-4 9004-34-6,
 Cellulose, biological studies 9004-57-3, Ethyl cellulose
 9004-62-0, Hydroxyethyl cellulose 9004-64-2,
 Hydroxypropyl cellulose 9004-65-3, Hydroxypropylmethyl cellulose
 9004-67-5, Methyl cellulose 9005-32-7, Alginic acid
 11138-66-2, Xanthan gum
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (irritant-free dental compns. for treatment of
 periodontal diseases contg. poloxamer surfactants and xylitol)
- RN 1405-86-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



- RN 9000-07-1 HCPLUS
 CN Carrageenan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-36-6 HCPLUS
 CN Karaya gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-65-1 HCPLUS
 CN Gum tragacanth (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-69-5 HCPLUS
 CN Pectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-32-4 HCPLUS
 CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

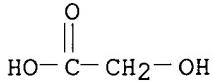
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
 CMF C2 H4 O3



RN 9004-34-6 HCPLUS
 CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-57-3 HCPLUS
 CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

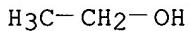
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 64-17-5
 CMF C2 H6 O



RN 9004-62-0 HCPLUS
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

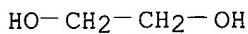
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
 CMF C2 H6 O2



RN 9004-64-2 HCPLUS
 CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

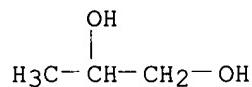
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
 CMF C₃ H₈ O₂



RN 9004-65-3 HCPLUS
 CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

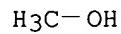
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

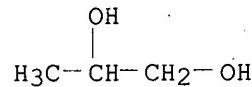
CM 2

CRN 67-56-1
 CMF C H₄ O



CM 3

CRN 57-55-6
 CMF C₃ H₈ O₂



RN 9004-67-5 HCPLUS
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
CMF C H4 O

H₃C—OH

RN 9005-32-7 HCPLUS
CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 11138-66-2 HCPLUS
CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 42 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1999:255378 HCPLUS

DN 130:257204

TI **Mouthwashes** containing **trace** element

IN Yu, Shifang

PA Sun, Jinzhong, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 11

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1171930	A	19980204	CN 1996-116441	19960726 <--
PRAI	CN 1996-116441		19960726 <--		

AB **Mouthwashes** contain 0.1-3 wt.% tea polyphenol exts. having purity .gtoreq.45%, the trace element lanthanum, flavoring agent, and carriers. The **mouthwashes** also contain 0.4-1.2 mg/L F-, 0.5-5 wt.% humic acid lanthanum salt, magnolol and/or exts. of Chinese violet, honeysuckle and/or dandelion, 0.1-5 wt.% polyvinyl pyrrolidone, 0.05-1 wt.% **glycyrrhizic acid** and 0-20% ethanol. The **mouthwashes** have pH 6.5-6.8.

ST **mouthwash** trace element

IT Viola

(exts. of Chinese; **mouthwashes** contg. trace element)

IT Dandelion

Honeysuckle (Lonicera)

Plant (Embryophyta)

(exts.; **mouthwashes** contg. trace element)

IT Humic acids

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (lanthanum salts; **mouthwashes** contg. trace element)

IT **Mouthwashes**

(**mouthwashes** contg. trace element)

IT Trace elements, biological studies

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (**mouthwashes** contg. trace element)

IT 64-17-5, Ethanol, biological studies 528-43-8, Magnolol

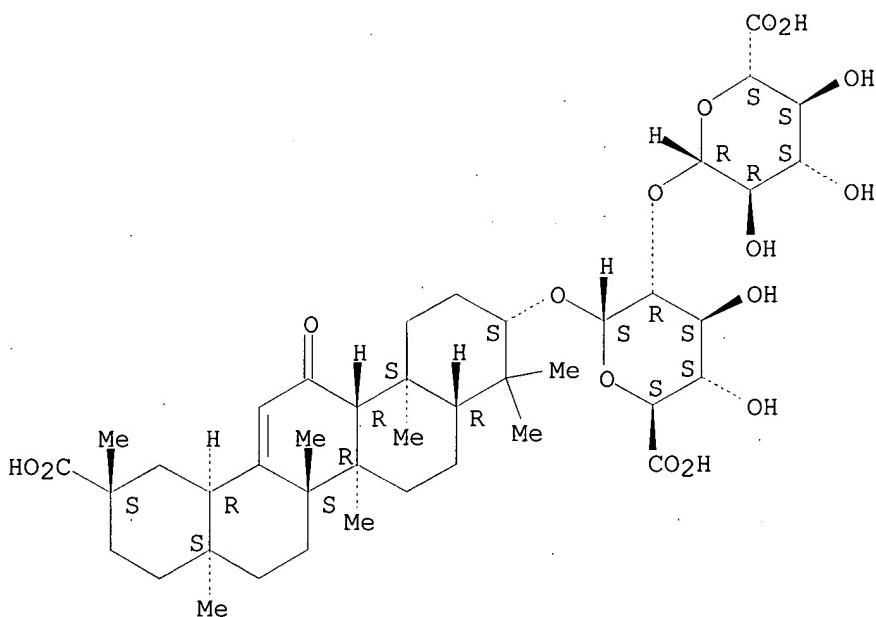
1405-86-3, Glycyrrhizic acid 7439-91-0,
 Lanthanum, biological studies 9003-39-8, Polyvinyl pyrrolidone
 16984-48-8, Fluoride, biological studies
 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
 chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 (mouthwashes contg. trace element)

IT 27073-41-2
 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
 chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 (tea; mouthwashes contg. trace element)

IT 1405-86-3, Glycyrrhizic acid
 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
 chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 (mouthwashes contg. trace element)

RN 1405-86-3 HCAPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



L105 ANSWER 43 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:242761 HCAPLUS

DN 130:242306

TI Chewing gum for preventing dental caries

IN Lu, Xuezha; Li, Yukui; Li, Weixing; Xu, Ruojun

PA Jiahua Industrial Co., Taiyuan City, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM A23G003-30

ICS A61K009-68; A61K035-78

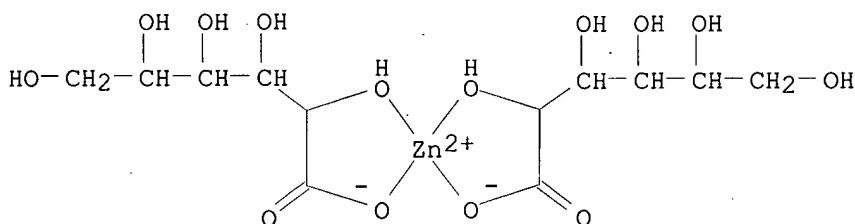
CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 11, 17, 62

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI CN 1123094 A 19960529 CN 1994-117729 19941114 <--
 PRAI CN 1994-117729 19941114 <--
 AB The title chewing gum is composed of gum bases 1, white sugar powder 7-10, glycal 1.0-1.8 wt%, and additives. The additives comprise licorice exts. 0.001- 0.01, vitamin C 0.01-0.03, honeysuckle flower exts. 0.001-0.01, vitamin B1 0.001-0.01, Ca gluconate 0.1-0.3, and Zn gluconate 0.01- 0.03 wt%.
 ST chewing gum dental caries; honeysuckle flower ext chewing gum caries; licorice ext chewing gum dental caries ; zinc gluconate chewing gum dental caries
 IT Tooth
 (caries; chewing gum for preventing dental caries)
 IT Chewing gum
 (chewing gum for preventing dental caries)
 IT Drug delivery systems
 (chewing gums; chewing gum for preventing dental caries)
 IT Licorice (Glycyrrhiza)
 (exts.; chewing gum for preventing dental caries)
 IT Honeysuckle (Lonicera)
 (flower exts.; chewing gum for preventing dental caries)
 IT Natural products, pharmaceutical
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (licorice, exts.; chewing gum for preventing dental caries)
 IT 50-81-7, Vitamin C, biological studies 59-43-8, Vitamin B1, biological studies 299-28-5, Calcium gluconate 4468-02-4, Zinc gluconate
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chewing gum for preventing dental caries)
 IT 4468-02-4, Zinc gluconate
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chewing gum for preventing dental caries)
 RN 4468-02-4 HCPLUS
 CN Zinc, bis(D-gluconato-.kappa.O1,.kappa.O2)-, (T-4)- (9CI) (CA INDEX NAME)



L105 ANSWER 44 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1999:175744 HCPLUS

DN 130:227562

TI Tooth coating composite and its preparation

IN Oka, Hironori

PA Japan

SO Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K007-16

ICS C09D193-02

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

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PI EP 900560 A1 19990310 EP 1998-117005 19980908 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 11147815 A2 19990602 JP 1997-309268 19971022 <--
 JP 3069540 B2 20000724
 JP 11240816 A2 19990907 JP 1998-58871 19980223 <--

PRAI JP 1997-285951 A 19970909 <--
 JP 1997-309268 A 19971022 <--
 JP 1998-58871 A 19980223 <--

AB The composite of the present invention comprising shellac dissolved in alc. and at least one of antibacterial constituent, antibacteria antibody, and efficacious constituent is applied to a **tooth** surface to form an antibacterial film on the **tooth** surface such that it can prevent effectively dental **caries** and **periodontal** disease and cure **periodontal** disease. Further, it is possible to apply the composite to a **tooth** without any special tech. skill such that it is quite easy to prevent dental **caries** and **periodontal** disease without any help of the dentist. A compn. was prep'd. contg. shellac 27.0, abs. ethanol 56.0, hinokitiol 2.0, amyl formate 7.0, and lavender oil 6.0g.

ST **tooth** coating composite; **anticaries tooth**
 coating composite; **periodontitis tooth** coating
 composite

IT Quaternary ammonium compounds, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (alkylbenzyldimethyl, chlorides; **tooth** coating composite)

IT Surfactants
 (amphoteric; **tooth** coating composite)

IT Bacteroides forsythus
 Campylobacter rectus
 Fusobacterium nucleatum
 Haemophilus actinomycetemcomitans
 Porphyromonas gingivalis
Streptococcus mutans
 Treponema denticola
 (antibodies to; **tooth** coating composite)

IT Cork tree (Phellodendron)
 (bark ext.; **tooth** coating composite)

IT **Tooth**
 (**caries**, antibodies; **tooth** coating composite)

IT **Periodontium**
 (disease; **tooth** coating composite)

IT Essential oils
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (lavender; **tooth** coating composite)

IT Essential oils
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (peppermint; **tooth** coating composite)

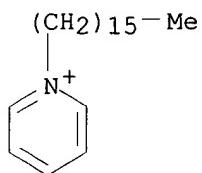
IT Essential oils
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (rosemary; **tooth** coating composite)

IT Abalone (Haliotis)
 Pinctada
 (shell flake; **tooth** coating composite)

IT Mica-group minerals, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (titanium; **tooth** coating composite)

IT Antibacterial agents

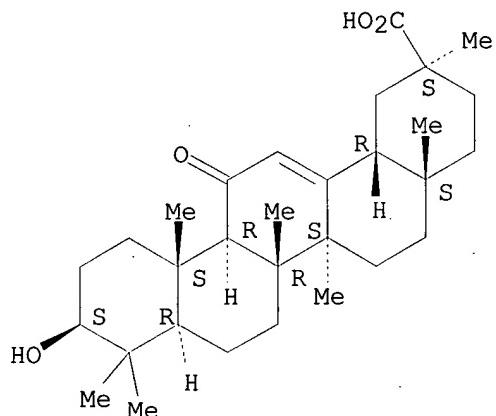
Coating materials
 Dental materials and appliances
 Pigments, nonbiological
 Propolis
 Rochinia niloticus
 (tooth coating composite)
 IT Antibodies
 Quaternary ammonium compounds, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (tooth coating composite)
 IT Shellac
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tooth coating composite)
 IT 55-56-1, Chlorhexidine 56-03-1D, Biguanide, derivs. 58-95-7,
 .alpha.-Tocopherol acetate 60-32-2, .epsilon.-Aminocaproic acid
 80-97-7, Dihydrocholesterol 89-83-8, Thymol 97-59-6, Allantoin
 108-95-2D, Phenol, derivs., biological studies 121-54-0, Benzethonium
 chloride **123-03-5, Cetylpyridinium chloride**
 123-92-2, Isoamyl acetate 127-69-5, Gantrosan 140-11-4, Benzyl acetate
 141-78-6, Acetic acid ethyl ester, biological studies 154-23-4, Catechin
 275-51-4, Azulene 471-34-1, Calcium carbonate, biological studies
471-53-4, Glycyrrhetic acid 499-44-5,
 Hinokitiol 516-95-0, Epidihydrocholesterol 522-51-0, Dequalinium
 chloride **546-46-3, Zinc citrate** 623-42-7, Methyl
 butyrate 638-49-3, Amyl formate 659-70-1, Isoamyl isovalerate
 1197-18-8, Tranexamic acid 1306-06-5, Hydroxyapatite 1318-94-1,
 Muscovite **1398-61-4, Chitin** **1405-86-3, .beta.-Glycyrrhizin** 2283-38-7 3380-34-5, Triclosan 5579-81-7
 7647-14-5, Sodium chloride, biological studies 7681-49-4, Sodium
 fluoride, biological studies 7757-93-9, Dicalcium phosphate 7783-48-4,
 Strontium fluoride 9001-63-2, Lysozyme **9012-76-4, Chitosan**
 10163-15-2, Sodium monofluorophosphate 12174-53-7, Sericite
 13463-67-7, Titania, biological studies 16984-48-8, Fluoride, biological
 studies 39660-61-2, Isopropylmethylphenol 43119-47-7,
 .alpha.-Tocopherol nicotinate 51274-00-1, Yellow iron oxide
 55682-20-7D, Glycine, N,N-bis(2-aminoethyl)-, N-alkyl derivs., chlorides
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (tooth coating composite)
 IT 64-17-5, Ethanol, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tooth coating composite)
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Blendax-Werke R Schneider & Co; DE 1965046 A1 1971 HCPLUS
 (2) Jenko, A; AT 172063 B 1952 HCPLUS
 (3) Kawai, J; JP 04082821 A HCPLUS
 IT **123-03-5, Cetylpyridinium chloride**
471-53-4, Glycyrrhetic acid **546-46-3**, Zinc citrate **1398-61-4, Chitin** **1405-86-3, .beta.-Glycyrrhizin** **9012-76-4, Chitosan**
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (tooth coating composite)
 RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



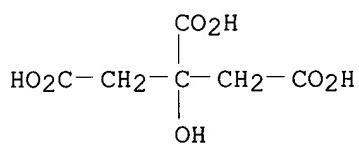
● Cl-

RN 471-53-4 HCAPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 546-46-3 HCAPLUS
 CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)



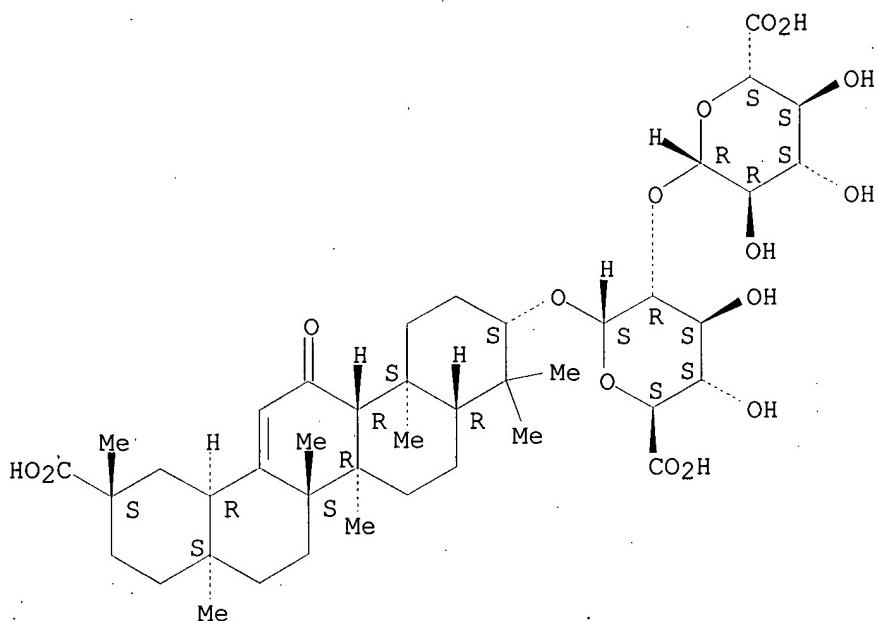
● 3/2 Zn

RN 1398-61-4 HCAPLUS
 CN Chitin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 1405-86-3 HCAPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9012-76-4 HCPLUS
 CN Chitosan (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 45 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1998:728277 HCPLUS

DN 130:17098

TI Solubilization of water-insoluble substances without using surfactants

IN Tokue, Wataru; Suzuki, Kazuaki

PA Shiseido Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-00

ICS A61K007-00; A61K007-06

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10298028	A2	19981110	JP 1997-111228	19970428
PRAI	JP 1997-111228		19970428		

AB Water-insol. perfumes, drug, and oils are solubilized by alkyl-modified carboxyvinyl polymers and glycyrrhizinates. The compns. show improved stability and are well applied on the skin without stickiness. A lotion contained Pemulen TR-2 0.1, KOH 0.05, ammonium glycyrrhizinate 0.5, glycerin 5, dipropylene glycol 5, ethanol 10, methylparaben 0.1, tocopherol acetate 0.05, perfumes 0.05, and ion-exchanged water to 100 %.

ST cosmetic solubilization polyacrylate glycyrrhizinate

IT Vinyl compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(carboxy-contg., polymers; solubilization of water-insol. substances by alkyl-modified carboxyvinyl polymers and glycyrrhizinate)

IT Cosmetics
 (lotions; solubilization of water-insol. substances by alkyl-modified carboxyvinyl polymers and glycyrrhizinate)

IT Hair preparations
 (solubilization of water-insol. substances by alkyl-modified carboxyvinyl polymers and glycyrrhizinate)

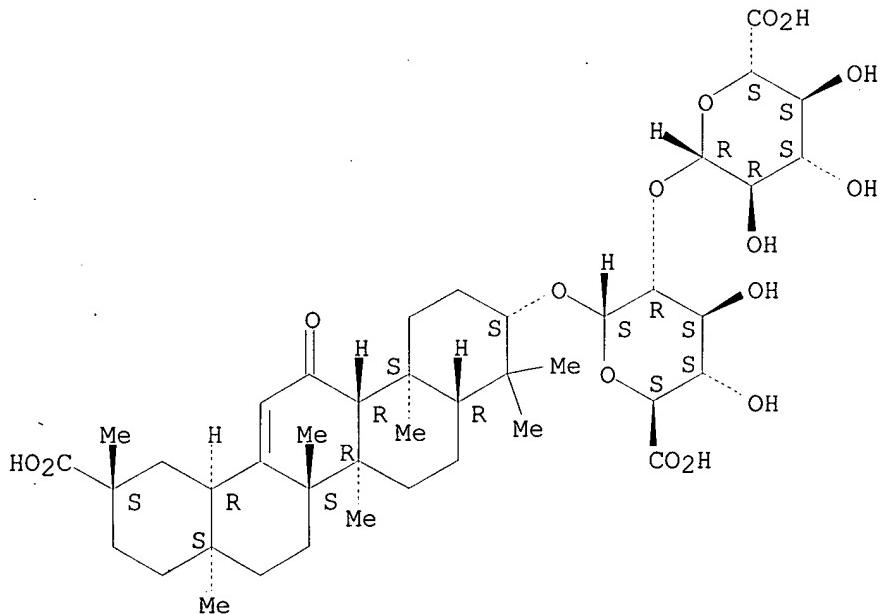
IT 53956-04-0, Ammonium glycyrrhizinate 68797-35-3
 , Dipotassium glycyrrhizinate 138789-85-2, Pemulen TR-1
 145687-02-1, Pemulen TR-2
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (solubilization of water-insol. substances by alkyl-modified carboxyvinyl polymers and glycyrrhizinate)

IT 53956-04-0, Ammonium glycyrrhizinate 68797-35-3
 , Dipotassium glycyrrhizinate
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (solubilization of water-insol. substances by alkyl-modified carboxyvinyl polymers and glycyrrhizinate)

RN 53956-04-0 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



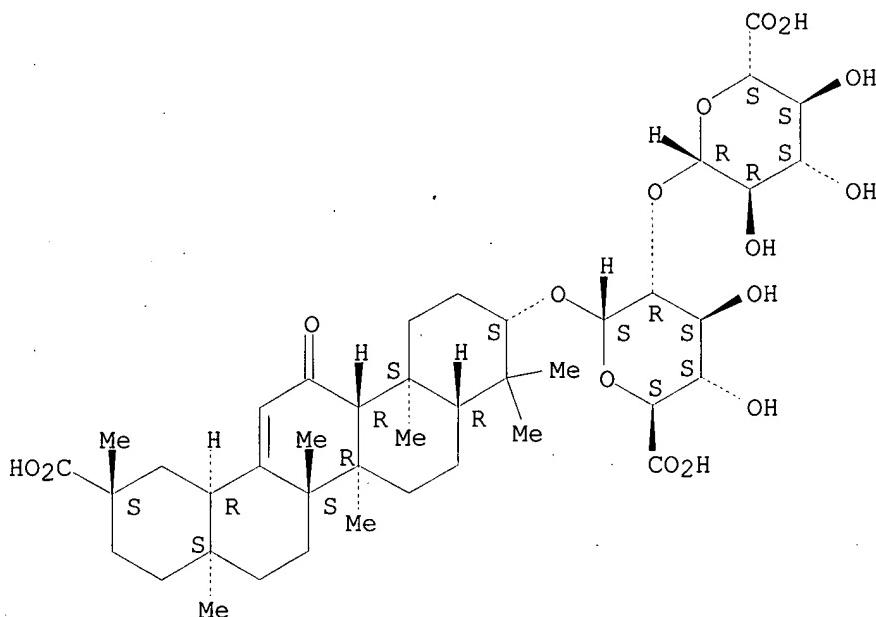
PAGE 2-A

● NH₃

RN 68797-35-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

●2 K

L105 ANSWER 46 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1998:682289 HCPLUS

DN 129:321009

TI Antimicrobial compositions

IN Iyer, Loka Nath M.; Scott, James R.; Whitfield, Douglas F.

PA Optiva Corp., USA

SO PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-47

ICS A61K031-165; A61K031-11; A61K031-12; A61K035-78; A61K007-26;
A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 10, 63

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9844926	A1	19981015	WO 1998-US6468	19980401 <--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,			

CM, GA, GN, ML, MR, NE, SN, TD, TG

US 5939050	A	19990817	US 1997-832821	19970404 <--
CA 2257500	AA	19981015	CA 1998-2257500	19980401 <--
AU 9868771	A1	19981030	AU 1998-68771	19980401 <--
AU 727242	B2	20001207		
EP 934067	A1	19990811	EP 1998-914411	19980401 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
BR 9804815	A	20000125	BR 1998-4815	19980401 <--
JP 2000514834	T2	20001107	JP 1998-542888	19980401 <--
NO 9805643	A	19990203	NO 1998-5643	19981203 <--
KR 2000016352	A	20000325	KR 1998-709926	19981204 <--

PRAI US 1997-832821 A1 19970404 <--
WO 1998-US6468 W 19980401 <--

AB Antimicrobial compns. comprising at least two antimicrobial agents exhibit reduced MIC values relative to the MIC for the agents making up the combination when measured alone. The compns. are useful as therapeutic agents such as in **oral hygiene** products. A no. of combinations were tested for their antimicrobial efficacy and example formulations were given, e.g., a formulation contg. cedarwood oil, juicy fruit basil oil and citral.

ST antimicrobial combination compn oil

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Rosmarinum officinalis; antimicrobial combination compns.)

IT **Actinomyces viscosus**
 Antibacterial agents
 Antimicrobial agents
Dentifrices
 Fusobacterium nucleatum
Licorice (Glycyrrhiza glabra)
Porphyromonas gingivalis
Streptococcus mutans
Streptococcus sanguinis
 (antimicrobial combination compns.)

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (basil, Ocimum basilicum, Ocimum basilicum, juicy fruit; antimicrobial combination compns.)

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cedarwood; antimicrobial combination compns.)

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cedarwood; antimicrobial combination compns.)

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (citronella; antimicrobial combination compns.)

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (juniper; antimicrobial combination compns.)

IT Essential oils
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lemon basil; antimicrobial combination compns.)

IT Essential oils

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lemon; antimicrobial combination compns.)

IT 56-75-7, Chloramphenicol 106-24-1, Geraniol 499-44-5, Hinokitiol 633-65-8, Berberine hydrochloride 2086-83-1, Berberine 5392-40-5, Citral 214749-68-5D, N-coco acyl derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimicrobial combination compns.)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adames, M; REV COLOMB CIENC QUIM -FARM 1983, V4(1), P95 HCPLUS
- (2) Airwick Industries Inc; GB 1214914 A 1970
- (3) Jumoku Chushutsu Seibun Ryo; JP 07089819 A 1995 HCPLUS
- (4) Kanebo Foods Ltd; JP 59175410 A 1984 HCPLUS
- (5) Kedzia, B; HERBA POL 1994, V40(1-2), P5 HCPLUS
- (6) Ladanyi, P; US 4145412 A 1979
- (7) Megalla, S; HERBA POL 1980, V26(3), P181 HCPLUS
- (8) Morris, J; J AM OIL CHEM SOC 1979, V56(5), P595 HCPLUS
- (9) Otsuka Pharm Co Ltd; JP 46028430 B4 1971 HCPLUS
- (10) Puyravaud, M; FR 2743722 A 1997 HCPLUS
- (11) S S Pharmaceutical Co Ltd; JP 58140014 A 1983 HCPLUS
- (12) The Procter & Gamble Co; EP 0805198 A 1997 HCPLUS
- (13) Thenoux, M; FR 2377195 A 1978 HCPLUS
- (14) Yokota, M; IGAKU TO SEIBUTSUGAKU 1994, V128(3), P105 HCPLUS

L105 ANSWER 47 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1998:682268 HCPLUS

DN 129:306329

TI Antimicrobial agents for **oral hygiene** products

IN Iyer, Lokanathan M.; Scott, James R.; Whitfield, Douglas F.

PA Optiva Corp., USA

SO PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9844901	A1	19981015	WO 1998-US6470	19980401 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2257596	AA	19981015	CA 1998-2257596	19980401 <--
	AU 9868773	A1	19981030	AU 1998-68773	19980401 <--
	EP 921784	A1	19990616	EP 1998-914413	19980401 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 9804814	A	20000125	BR 1998-4814	19980401 <--
	NZ 333146	A	20000526	NZ 1998-333146	19980401 <--
	JP 2000512660	T2	20000926	JP 1998-542889	19980401 <--
	NO 9805644	A	19990202	NO 1998-5644	19981203 <--
	KR 2000016351	A	20000325	KR 1998-709925	19981204 <--

PRAI US 1997-825525 A1 19970404 <--
WO 1998-US6470 W 19980401 <--

AB **Oral hygiene** compns. include an antimicrobial agent selected from cedarwood oil, chloramphenicol, citronella oil, **Glycyrrhiza glabra** ext., juicy fruit basil oil, lemon basil oil, and Rosmarinus officinalis oil. Application of these **oral hygiene** compns. to the oral cavity effectively reduces or prevents the growth of bacteria assocd. with dental plaque, and with dental caries and/or periodontal diseases such as **Actinomyces viscosus**, Campylobacter rectus, Fusobacterium nucleatum, Porphyromonas gingivalis, **Streptococcus mutans**, and **Streptococcus sanguis**.

ST antimicrobial dentifrice chloramphenical cedarwood oil

IT **Actinomyces viscosus**
Antimicrobial agents
Campylobacter rectus
Dentifrices
Fusobacterium nucleatum
Porphyromonas gingivalis
Streptococcus mutans
Streptococcus sanguinis
(antimicrobial agents for **oral hygiene** products)

IT Essential oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(basil, Ocimum basilicum, Ocimum basilicum; antimicrobial agents for **oral hygiene** products)

IT **Tooth**
(caries; antimicrobial agents for **oral hygiene** products)

IT Essential oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(cedarwood; antimicrobial agents for **oral hygiene** products)

IT Essential oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(citronella; antimicrobial agents for **oral hygiene** products)

IT **Periodontium**
(disease; antimicrobial agents for **oral hygiene** products)

IT **Licorice (Glycyrrhiza glabra)**
(exts.; antimicrobial agents for **oral hygiene** products)

IT **Gingiva**
(gingivitis; antimicrobial agents for **oral hygiene** products)

IT Essential oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(lemon; antimicrobial agents for **oral hygiene** products)

IT **Tooth**
(plaque; antimicrobial agents for **oral hygiene** products)

IT Essential oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(rosemary; antimicrobial agents for **oral hygiene** products)

IT 56-75-7, Chloramphenicol 499-44-5, Hinokitiol
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (antimicrobial agents for **oral hygiene** products)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1983, V007(143), PC-172
- (2) Anon; PATENT ABSTRACTS OF JAPAN 1988, V012(482), PC-553
- (3) Anon; PATENT ABSTRACTS OF JAPAN 1991, V015(297), PC-0854
- (4) Anon; PATENT ABSTRACTS OF JAPAN 1996, V096(004)
- (5) Kanebo Ltd; JP 07309733 A 1995
- (6) Kanebo Shokuhin Kk; JP 59175410 A 1984 HCPLUS
- (7) Maruzen Chemical Co; JP 03199314 A 1991 HCPLUS
- (8) Maruzen Kasei Co Ltd; JP 03109314 A 1991 HCPLUS
- (9) Morishita Jintan Kk; JP 07316064 A 1995 HCPLUS
- (10) Pokka Corp; JP 07025764 A 1995 HCPLUS
- (11) Taiyo Perfumery Co Ltd; JP 03255031 A 1991
- (12) Tsurui Yakuhin Kogyo Kk; JP 58057320 A 1983
- (13) Yasutake, H; JP 63198616 A 1988 HCPLUS

L105 ANSWER 48 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1998:649973 HCPLUS

DN 129:280787

TI Deoxycholic acid compositions for treatment of **periodontal** diseases

IN Ha, Jae Mong; Kim, Moon Moo; Choi, Jong Heon; Lim, Hyeong Jun; Chang, Sug Youn; Ahn, Ho Jeong; Choi, Eu Jene; Lee, Seung Joon; Bak, Hong Soon

PA Lg Chemical Ltd., S. Korea

SO U.S., 10 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-16

ICS A61K007-18; A61K007-26

NCL 424058000

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 1, 63

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5817297	A	19981006	US 1997-790892	19970129 <--
PRAI	KR 1996-30337		19960725 <--		
	KR 1996-30499		19960725 <--		

AB The present invention relates to a compn. for enhancing **oral hygiene** which can effectively prevent and treat **periodontal** diseases and dental **caries**, characterized in that it contains as an effective component 1 or more components selected from ursodesoxycholic acid and chenodesoxycholic acid having a good inhibiting effect on collagenase, which is known as the inducer of **gingivitis**. Thus, a **dentifrice** contained 90% EtOH 10.00, glycerin 10.00, SLS 1.20, sodium saccharin 0.50, p-hydroxybenzoate 0.10, ursodeoxycholic acid 0.02, disodium fluorophosphate 0.76, perfume 1.00, and water 100.0%.

ST deoxycholate **periodontal** disease **dentifrice**

IT **Dentifrices**

Dentifrices
 (chewing gums; deoxycholic acid compns. for treatment of **periodontal** diseases)

IT Chewing gum

Chewing gum

(**dentifrices**; deoxycholic acid compns. for treatment of **periodontal** diseases)

IT **Dentifrices**

Mouthwashes

(deoxycholic acid compns. for treatment of **periodontal diseases**)

IT Enzymes, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(deoxycholic acid compns. for treatment of **periodontal diseases**)

IT **Periodontium**

(disease; deoxycholic acid compns. for treatment of **periodontal diseases**)

IT Angelica

Chamomilla

Cimicifuga

Cork tree (*Phellodendron*)

Honeysuckle (*Lonicera*)

Licorice (*Glycyrrhiza*)

Machilis

Platycodon

Schizonepeta

Taraxacum

Tea (*Camellia sinensis*)

(exts.; deoxycholic acid compns. for treatment of **periodontal diseases**)

IT **Gingiva**

(**gingivitis**; deoxycholic acid compns. for treatment of **periodontal diseases**)

IT Perfumes

(myrrh, exts.; deoxycholic acid compns. for treatment of **periodontal diseases**)

IT **Tooth**

(**plaque**; deoxycholic acid compns. for treatment of **periodontal diseases**)

IT Bamboo

(salts; deoxycholic acid compns. for treatment of **periodontal diseases**)

IT 9001-12-1, Collagenase

RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(deoxycholic acid compns. for treatment of **periodontal diseases**)

IT 55-56-1, Chlorhexidine 97-59-6D, Allantoin, derivs. 128-13-2, Ursodesoxycholic acid 142-62-1D, Caproic acid, derivs. 474-25-9, Chenodesoxycholic acid 1197-18-8, Tranexamic acid 3380-34-5, Triclosan 7631-97-2, Sodium fluorophosphate 7681-49-4, Sodium fluoride, biological studies 15861-05-9, Fluoramine 55128-73-9, Tin fluoride RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(deoxycholic acid compns. for treatment of **periodontal diseases**)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Andersen; US 5487902 1996
- (2) Byong-Son, M; The Journal of the Korean Dental Association 1996, V34(1), P63
- (3) Castagnola; US 4565810 1986 HCPLUS
- (4) Di Schiena; US 4565811 1986 HCPLUS
- (5) Fowler; US 5635469 1997
- (6) Giuliani; US 5321019 1994 HCPLUS
- (7) Ha; US 5180573 1993 HCPLUS

- (8) Hutchinson; US 5681606 1997 HCAPLUS
- (9) Hyldon; US 4175124 1979 HCAPLUS
- (10) Kigasawa; US 4572832 1986 HCAPLUS
- (11) Lyon; US 4115313 1978 HCAPLUS
- (12) Makino; US 5651997 1997 HCAPLUS
- (13) Min-Young, K; The Journal of the Korean Dental Association 1996, V34(6), P433
- (14) Parenti; US 5260462 1993 HCAPLUS
- (15) Sato; US 4866044 1989 HCAPLUS

L105 ANSWER 49 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:542962 HCAPLUS

DN 129:166230

TI Compositions and methods for prevention and treatment of vascular degenerative diseases

IN Kosbab, John V.

PA USA

SO PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-07

ICS A61K031-70; A61K031-255; A61K031-355; A61K031-375; A61K033-06; A61K033-30; A61K033-24; A61K033-32; A61K035-78; C07C039-12; C07C057-00; C07D311-00; C07D345-00

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9833494	A1	19980806	WO 1998-US2005	19980204 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU	9861414	A1	19980825	AU 1998-61414	19980204 <--
EP	1021177	A1	20000726	EP 1998-906094	19980204 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP	2001511153	T2	20010807	JP 1998-533193	19980204 <--
US	2001031744	A1	20011018	US 2001-827251	20010405 <--
PRAI	US 1997-37084P	P	19970204	<--	
	US 1997-43262P	P	19970417	<--	
	US 1998-18273	B1	19980204	<--	
	WO 1998-US2005	W	19980204	<--	

AB This invention relates to nutrient and therapeutic compns. for treatment and prevention of symptoms and disease conditions assocd. with microangiopathy and macroangiopathy and to methods using the compns. In particular, the invention relates to compns. useful in the treatment of diabetic retinopathy and nephropathy, to compns. useful in the treatment of other retinal disorders including macular degeneration and cataracts, to compns. useful in wound healing, to compns. useful for treatment and prevention of neuropathy, to compns. useful for treatment and prevention of cardiovascular disease and to compns. useful for the treatment and prevention of dental and **periodontal** disorders. An exemplary diabetic compn. contains bilberry ext., Ca (Krebs), chondroitin sulfate, Cr picolinate, Co Q10, Fenugreek seed powder, Flax seed powder, folic acid, linoleic acid, Ginkgo biloba, Gymnema sylvestre, taurine (or homotaurine), grape seed ext., acetyl L-carnitine, lutein, Mg (Krebs), N-acetyl-L-cysteine, pine bark ext., phytosterol complex, K citrate,

- protamine sulfate, shark cartilage, soy isolate, green tea polyphenols, vitamin A, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin E, and Zn (Krebs).
- ST bioflavonoid neovascular regulator vascular degeneration treatment; diabetic microangiopathy plant bioflavonoid chondroitin sulfate
- IT Aloe barbadensis
Angiogenesis inhibitors
Antioxidants
Ginger
Ginkgo biloba
Gymnema sylvestre
Licorice (Glycyrrhiza)
(bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Carotenes, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Flavonoids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(bioflavonoids; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Tooth
(caries, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Blood vessel, disease
(diabetic microangiopathy, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Kidney, disease
(diabetic nephropathy, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Cardiovascular system
Gingiva
Periodontium
(disease, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Bark
Bilberry
(exts.; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Tea products
(green; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Blood vessel, disease
(injury, macroangiopathy; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Eye, disease
(macula, degeneration, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Blood vessel, disease
(microangiopathy; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Nerve, disease
(neuropathy, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Drug delivery systems
(oral; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Eye, disease

(retinopathy, treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)

- IT Grape
 (seed, exts.; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Fenugreek (*Trigonella foenum-graecum*)
 (seed; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Collagens, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (synthesis promotion in; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT Cataract
 (treatment of; bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)
- IT 50-81-7, Vitamin C; biological studies 67-97-0D, Vitamin D3, derivs.
 539-86-6, Allicin 1406-18-4, Vitamin E 7439-95-4D, Magnesium, compds., biological studies 7440-47-3D, Chromium, compds., biological studies
7440-66-6D, Zinc, compds., biological studies
 7440-70-2D, Calcium, compds., biological studies **9007-28-7**, Chondroitin sulfate 11103-57-4, Vitamin A 27882-76-4 29031-19-4
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bridge Research Foundation; CA 1277909 A 1990 HCPLUS
 - (2) Nutramax Laboratories Inc; WO 9422453 A 1994 HCPLUS
 - (3) Paul; US 5292538 A 1994 HCPLUS
 - (4) Rowland; US 5405613 A 1995 HCPLUS
 - (5) Seikagaku Kogyo Kabushiki Kaisha Seikagaku Corporation; EP 0609042 A1 1994 HCPLUS
 - (6) The Howard Foundation; WO 9500130 A1 1995 HCPLUS
- IT **7440-66-6D, Zinc**, compds., biological studies
9007-28-7, Chondroitin sulfate
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases)

RN 7440-66-6 HCPLUS

CN Zinc (7CI, 8CI, 9CI) (CA INDEX NAME)

Zn

RN 9007-28-7 HCPLUS
 CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

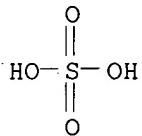
CM 1

CRN 9007-27-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9

CMF H₂O₄S

L105 ANSWER 50 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1998:335498 HCPLUS

DN 129:32343

TI Water-soluble azulene preparations and their manufacture

IN Ishiyama, Yoji; Matsuura, Kazuo; Yamamura, Haruo; Kamino, Taketoshi

PA Tanpei Seiyaku K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K031-015

ICS A61K031-015; A61K047-30

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10139660	A2	19980526	JP 1996-303019	19961114 <--
PRAI	JP 1996-303019		19961114 <--		
AB	The prepns. are manuf. by mixing water-sol. azulene to nonionic surfactants, dispersing the mixt. to a petroleum hydrocarbons contg. soybean phospholipids and nonionic surfactants, and further mixing the dispersion with a tissue-adhering base contg. gelatin, EtOH, polyols, carboxyvinyl polymers, and water-sol. polymers. The prepns. show good storage stability and are formed into gels, creams, ointments, etc. for treatment of skin diseases and periodontal diseases, and for cosmetics. A W/O emulsion was prep'd. from polyoxyethylene hydrogenated castor oil (HLB 6.0) 1.00, polyethylene glycol monostearate (HLB 4.0) 0.10, liq. paraffin 1.00, solid paraffin 0.05, water-sol. azulene 0.05, l-menthol 0.80, allantoin chlorohydroxyaluminum 1.50, di-K glycyrrhizinate 0.40, cetylpyridinium chloride 0.10, Carbopol 940 3.00, glycerin 38.00, NaOH 0.96, water-sol. gelatin 0.40, EtOH 10.00, di-Na edetate 0.10, hydrogenated soya lecithin 0.01, hydroxypropyl cellulose 4.00 wt.%, and H ₂ O balance. The emulsion was stored at 40.degree. for 6 mo. to show remaining rate of azulene 98.0%, vs. 96.1% for a control contg. neither EtOH nor lecithin.				
ST	water sol azulene prepn soya lecithin; ethanol soybean phospholipid azulene topical prepn				
IT	Vinyl compounds, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (carboxy-contg., polymers; manuf. of water-sol. azulene prepns. contg. EtOH and soybean phospholipids with good stability)				
IT	Drug delivery systems Drug delivery systems (emulsions, topical; manuf. of water-sol. azulene prepns. contg. EtOH and soybean phospholipids with good stability)				
IT	Anti-inflammatory agents (manuf. of water-sol. azulene prepns. contg. EtOH and soybean phospholipids with good stability)				
IT	Gelatins, biological studies Paraffin oils Paraffin waxes, biological studies Petrolatum				

- Petroleum hydrocarbons
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (manuf. of water-sol. azulene prepns. contg. EtOH and soybean
 phospholipids with good stability)
- IT Hydrocarbon waxes, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (microcryst.; manuf. of water-sol. azulene prepns. contg. EtOH and
 soybean phospholipids with good stability)
- IT Surfactants
 (nonionic; manuf. of water-sol. azulene prepns. contg. EtOH and soybean
 phospholipids with good stability)
- IT Alcohols, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (polyhydric; manuf. of water-sol. azulene prepns. contg. EtOH and
 soybean phospholipids with good stability)
- IT Lecithins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (soya, hydrogenated; manuf. of water-sol. azulene prepns. contg. EtOH
 and soybean phospholipids with good stability)
- IT Phospholipids, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (soya; manuf. of water-sol. azulene prepns. contg. EtOH and soybean
 phospholipids with good stability)
- IT Drug delivery systems
 (topical; manuf. of water-sol. azulene prepns. contg. EtOH and soybean
 phospholipids with good stability)
- IT Polymers, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (water-sol.; manuf. of water-sol. azulene prepns. contg. EtOH and
 soybean phospholipids with good stability)
- IT 64-17-5, Ethanol, biological studies
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (manuf. of water-sol. azulene prepns. contg. EtOH and soybean
 phospholipids with good stability)
- IT 56-81-5, Glycerin, biological studies 275-51-4, Azulene 76050-42-5,
 Carbopol 940
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (manuf. of water-sol. azulene prepns. contg. EtOH and soybean
 phospholipids with good stability)

L105 ANSWER 51 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1997:731709 HCPLUS

DN 127:362488

TI Oral compositions for periodontal disease

IN Nakada, Koji; Naeshiro, Eiichi

PA Sunstar K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09291018	A2	19971111	JP 1996-131066	19960425 <--
PRAI	JP 1996-131066		19960425 <--		
AB Oral compns. for controlling periodontal disease comprise Betula platyphylla japonica sap and substances selected from lysozyme, nonsteroidal antiinflammatories, .beta.-					

glycyrrhizin, .epsilon.-aminocaproic acid and sodium azulenesulfonate. A **toothpaste** contained calcium phosphate 45.0, Na CM-cellulose 1.0, glycerin 20.0, Na lauryl sulfate 1.5, perfumes 1.0, Na saccharin 0.1, and *B. platyphylla* japonica sap to 100 %.

ST **dentifrice periodontal** disease *Betula* sap;
nonsteroidal antiinflammatory **dentifrice periodontal** disease

IT Sap
(*Betula platyphylla* japonica; **oral compns.** for **periodontal** disease)

IT **Periodontium**
(disease; **oral compns.** for **periodontal** disease)

IT Tablets
(**gargling**; **oral compns.** for **periodontal** disease)

IT Drug delivery systems
(lozenges; **oral compns.** for **periodontal** disease)

IT Cream
(massage; **oral compns.** for **periodontal** disease)

IT Anti-inflammatory agents
(nonsteroidal; **oral compns.** for **periodontal** disease)

IT Chewing gum
Dentifrices
Mouthwashes
(**oral compns.** for **periodontal** disease)

IT Pasta
(oral; **oral compns.** for **periodontal** disease)

IT Birch (*Betula platyphylla* japonica)
(sap; **oral compns.** for **periodontal** disease)

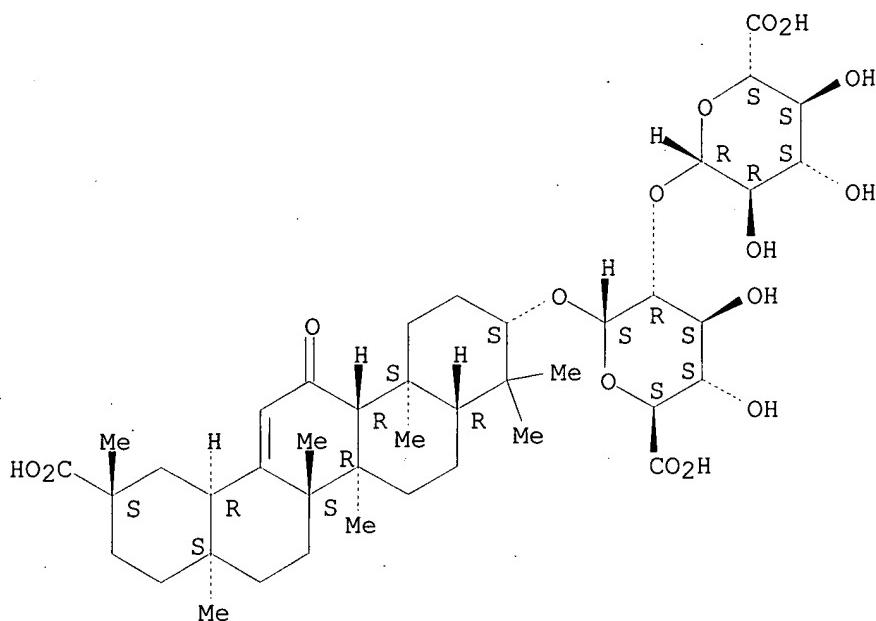
IT 50-78-2, Aspirin 53-86-1, Indomethacin 54-21-7, Sodium salicylate 60-32-2, .epsilon.-Aminocaproic acid 1405-86-3, .beta.-
Glycyrrhizin 5104-49-4, Flurbiprofen 9001-63-2, Lysozyme 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 52549-17-4, Pranoprofen 75869-04-4, Sodium azulenesulfonate
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**oral compns.** for **periodontal** disease)

IT 1405-86-3, .beta.-**Glycyrrhizin**
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**oral compns.** for **periodontal** disease)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.**.beta.**,20.**.beta.**)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 52 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1997:558028 HCPLUS

DN 127:210396

TI Transparent topical preparations containing **water-insoluble** acidic pharmaceuticals with good bioavailability
IN Matsuda, Kenji; Hayashi, Hiroyuki; Miyamoto, Sonoko; Toda, Masayki
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K031-19

ICS A61K009-06; A61K009-08; A61K009-70; A61K031-405; A61K031-60

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09216820	A2	19970819	JP 1996-48135	19960209
PRAI	JP 1996-48135		19960209		

AB Topical preps. with pH 3-6 contain **H2O-insol.** acidic pharmaceuticals having .gtoreq.1 CO₂H group(s) per mol., ether-type nonionic surfactants with HLB .gtoreq.14, and **glycyrrhizinic acid** water-sol. salts. An aq. soln. (pH 4.8) contg. salicylic acid (I), Nikkol NP-10 (polyoxyethylene nonylphenyl ether), and di-K **glycyrrhizinate** was applied to isolated rat skin to show I absorption 0.61 .mu.g/mg. The soln. was stored at 50.degree. for 3 mo to show no turbidity or pptn.

ST topical **water insol** carboxylate drug
glycyrrhizinate; solubilizer nonionic surfactant carboxylate drug topical; salicylate polyoxyethylene ether topical transparency bioavailability

IT Drug delivery systems

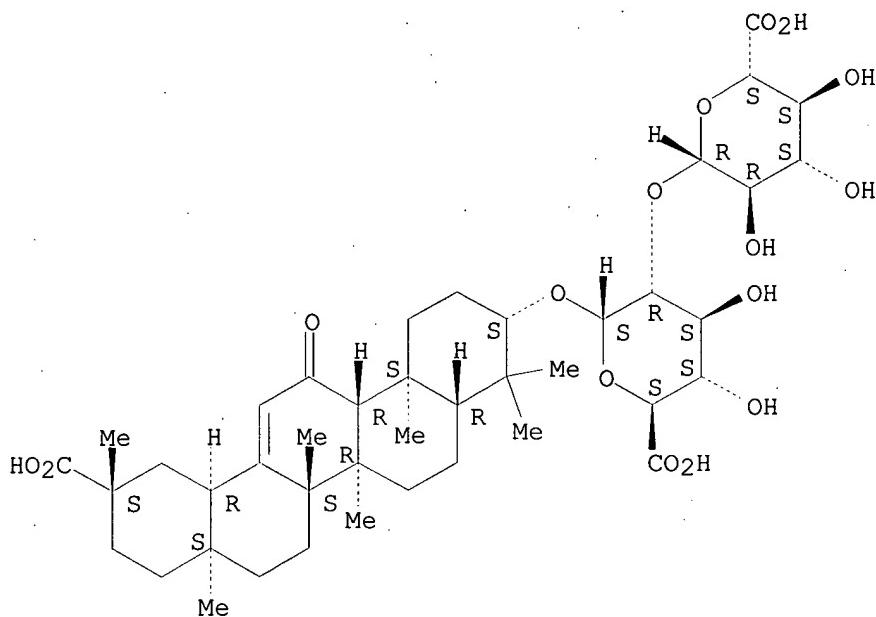
(gels, topical; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)

IT Drug delivery systems
(lotions; transparent topical preps. contg. **water-**

- IT Surfactants
 (nonionic; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT Anti-inflammatory agents
 (nonsteroidal; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT Drug delivery systems
 (solns., topical; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT Drug delivery systems
 (topical; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT Drug delivery systems
 (transdermal, patches; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT Drug bioavailability
 Solubilizers
 (transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT 9002-92-0, Nikkol BL-21 9004-95-9, Nikkol BC 7 9004-98-2, Nikkol BO-20
 9016-45-9, Nikkol NP-10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (solubilizer; transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT 69-72-7, Salicylic acid, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT 53-86-1, Indomethacin 22071-15-4, Ketoprofen 40828-46-4, Suprofen
 53956-04-0, Monoammonium **glycyrrhizinate**
 68797-35-3, Dipotassium **glycyrrhizinate**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- IT 53956-04-0, Monoammonium **glycyrrhizinate**
 68797-35-3, Dipotassium **glycyrrhizinate**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (transparent topical preps. contg. **water-insol.** acidic drugs, nonionic surfactants, and **glycyrrhizinate** with good bioavailability)
- RN 53956-04-0 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-. β -D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

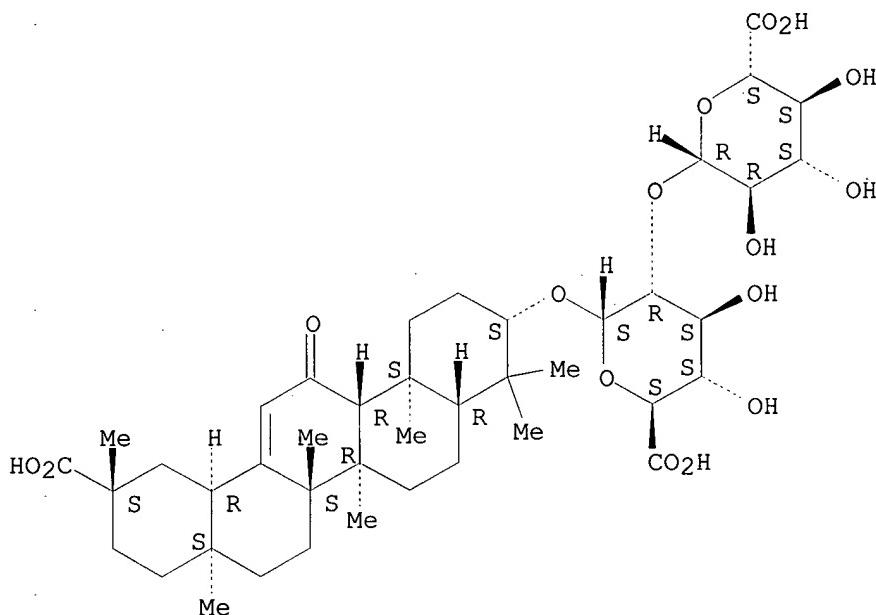
● NH₃

RN 68797-35-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

L105 ANSWER 53 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1997:2935 HCAPLUS

DN 126:36913

TI **Dentifrices** containing nonionic foaming agents and quaternary ammonium bactericides

IN Yoshe, Makoto; Kojima, Nobuo

PA Lion Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-22

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08259427	A2	19961008	JP 1995-88878	19950322 <--
PRAI	JP 1995-88878		19950322 <--		

AB The title compns., which show good foaming and antibacterial activity and useful for prevention and treatment of **periodontal** disease and dental **caries**, contain .gtoreq.1.5 wt.% nonionic foaming agents and polyfunctional quaternary ammonium bactericides. A **toothpaste** was prep'd. from Al(OH)₃ 40, CM-cellulose 1, carrageenan 0.3, sorbitol 35, polyethylene glycol 3, sucrose fatty acid ester 2, decamethylenebis(trimethylammonium chloride) 0.05, .beta.-**glycyrrhetic acid** 0.02, Bu p-hydroxybenzoate 0.1, perfume 1, and H₂O to 100.0 wt.%.

- ST **dentifrice** foaming agent quaternary ammonium; nonionic foaming agent **dentifrice** bactericide; quaternary ammonium bactericide
dentifrice foaming; **periodontal** disease
dentifrice quaternary ammonium bactericide; dental **caries**
quaternary ammonium bactericides
- IT **Tooth**
(**caries**; compns. contg. nonionic foaming agents and
quaternary ammonium bactericides for **periodontal** disease and
dental **caries**)
- IT Antibacterial agents
- Mouthwashes
(**dentifrice** compns. contg. nonionic foaming agents and
quaternary ammonium bactericides)
- IT Quaternary ammonium compounds, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**dentifrice** compns. contg. nonionic foaming agents and
quaternary ammonium bactericides)
- IT **Periodontium**
(disease, treatment of; **dentifrice** compns. contg. nonionic foaming agents and quaternary ammonium bactericides)
- IT Fatty acids, biological studies
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters, with sucrose; **dentifrice** compns. contg. nonionic foaming agents and quaternary ammonium bactericides)
- IT Polyoxyalkylenes, biological studies
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogenated castor oil derivs.; **dentifrice** compns. contg.
nonionic foaming agents and quaternary ammonium bactericides)
- IT Castor oil
Castor oil
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogenated, ethoxylated; **dentifrice** compns. contg.
nonionic foaming agents and quaternary ammonium bactericides)
- IT Foaming agents
(nonionic; **dentifrice** compns. contg. nonionic foaming agents and quaternary ammonium bactericides)
- IT Drug delivery systems
(ointments; compns. contg. nonionic foaming agents and quaternary ammonium bactericides for **periodontal** disease and dental **caries**)
- IT 522-51-0, Dequalinium chloride 3785-44-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**dentifrice** compns. contg. nonionic foaming agents and
quaternary ammonium bactericides)
- IT 3198-38-7, Decamethylenebis(trimethylammonium chloride) 9004-95-9,
Polyoxyethylene cetyl ether 9005-00-9, Polyoxyethylene stearyl ether
9005-67-8, Polyoxyethylene sorbitan monostearate 25322-68-3D,
hydrogenated castor oil derivs. 56453-21-5, Lactitol monolaurate
184673-43-6
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**dentifrice** compns. contg. nonionic foaming agents and
quaternary ammonium bactericides)

DN 126:65422
 TI Compositions containing interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease
 IN Nishihara, Tatsuji
 PA Kyowa Hakko Kogyo Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-16
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 1, 62

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08245351	A2	19960924	JP 1995-210307	19950818 <--
PRAI JP 1995-2334		19950111 <--		

AB Compns. contg. interleukin-1.alpha. inhibitors (receptor antagonist) are useful for the prevention or treatment of **periodontal** disease induced by microorganisms such as *Actinobacillus actinomycetemcomitans*. As an example, an oral pasta comprised interleukin-1.alpha. receptor antagonist 0.2, cetanol 10.0, squalane 20.0, precipitable silica 5.0, ethoxylated castor oil 0.1, sorbitan monooleate 1.0, **glycyrrhetic acid** 0.1, sodium saccharin 0.6, perfumes 0.6 and water 62.4%. Interleukin-1.alpha. inhibitors also can be incorporated into **dentifrices**.

ST interleukin 1alpha inhibitor **periodontal** disease; oral pasta interleukin inhibitor **periodontal** disease

IT **Dentifrices**
 (compns. contg. interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease)
 IT **Haemophilus actinomycetemcomitans**
 (compns. contg. interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease induction by)
 IT **Periodontium**
 (disease; compns. contg. interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease)
 IT Interleukin 1.alpha.
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhibitors; compns. contg. interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease)
 IT Pasta
 (oral; compns. contg. interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease)
 IT Drug delivery systems
 (pastes, oral; compns. contg. interleukin-1.alpha. inhibitors for prevention or treatment of **periodontal** disease)

L105 ANSWER 55 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:534886 HCAPLUS

DN 125:177041

TI **Dentifrices** containing antiplasmin and vitamins for **periodontal** disease control

IN Yamamoto, Mizuya; Maruyama, Masatatsu

PA Lion Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

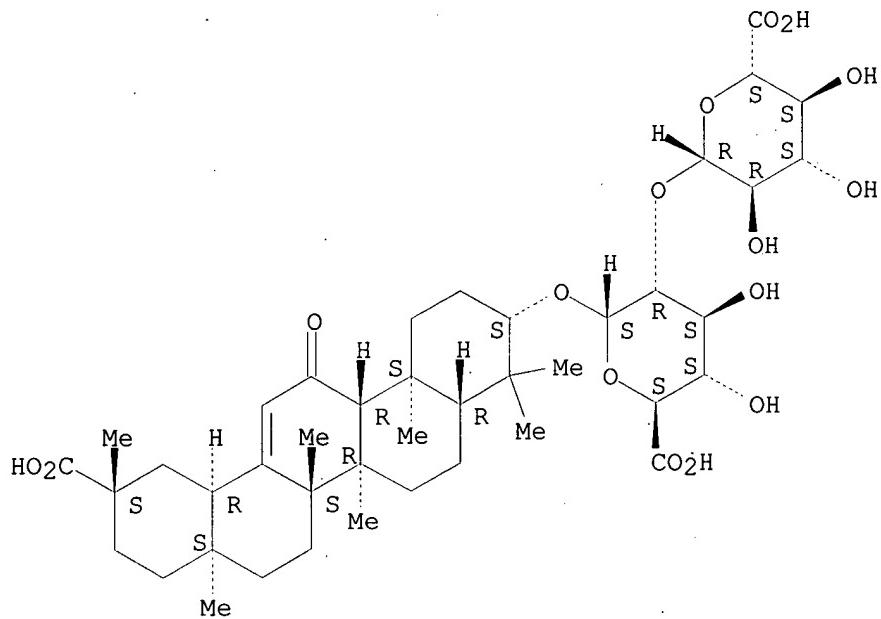
ICS G01N011-14

CC 62-7 (Essential Oils and Cosmetics)
Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08175942	A2	19960709	JP 1994-337191	19941226 <--
PRAI	JP 1994-337191		19941226 <--		
AB Dentifrices contain abrasives, thickening agents, binders, surfactants, and periodontal disease-controlling antiplasmin and vitamins and have an yield value of .gtoreq.100Pa, a hysteresis loop area of .ltoreq.1800Pa/s and an yield value/shear stress (at max. speed) ratio of 3, when the viscosity is detd. with a rotational viscometer at 25.degree.. As an example, a toothpaste contained calcium phosphate dihydrate 45.0, silica 3.0, xanthan gum 0.6, polyacrylate sodium 0.7, propylene glycol 5.0, glycerin 20.0, Et p-hydroxybenzoate 0.1, sodium benzoate 0.3, sodium saccharin 0.2, sodium laurylsulfate 1.4, myristic acid diethanolamine 0.8, perfumes 1.0, sodium monofluorophosphate 0.7, trichlorohydroxydiphenyl ether 0.02, dihydroxyaluminum allantoinate 0.1 and purified water to 100 wt.%. The preps. showed improved periodontal disease-controlling activity and good phys. characteristics.					
ST dentifrice antiplasmin vitamin periodontal disease control					
IT Dentifrices (dentifrices contg. antiplasmin and vitamins for periodontal disease control)					
IT Vitamins RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dentifrices contg. antiplasmin and vitamins for periodontal disease control)					
IT Abrasives Binding materials Surfactants Thickening agents (in dentifrices contg. antiplasmin and vitamins for periodontal disease control)					
IT Periodontium (disease, dentifrices contg. antiplasmin and vitamins for periodontal disease control)					
IT 58-95-7, .alpha.-Tocopherol acetate 97-59-6, Allantoin 1197-18-8, Tranexamic acid 1405-86-3, Glycyrrhizinic acid 3697-42-5, Chlorhexidine hydrochloride 5579-81-7, Dihydroxyaluminum allantoinate 9049-68-7, Antiplasmin 68797-35-3, Dipotassium glycyrrhizinate RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dentifrices contg. antiplasmin and vitamins for periodontal disease control)					
IT 1405-86-3, Glycyrrhizinic acid 68797-35-3, Dipotassium glycyrrhizinate RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dentifrices contg. antiplasmin and vitamins for periodontal disease control)					
RN	1405-86-3 HCPLUS				
CN	.alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.

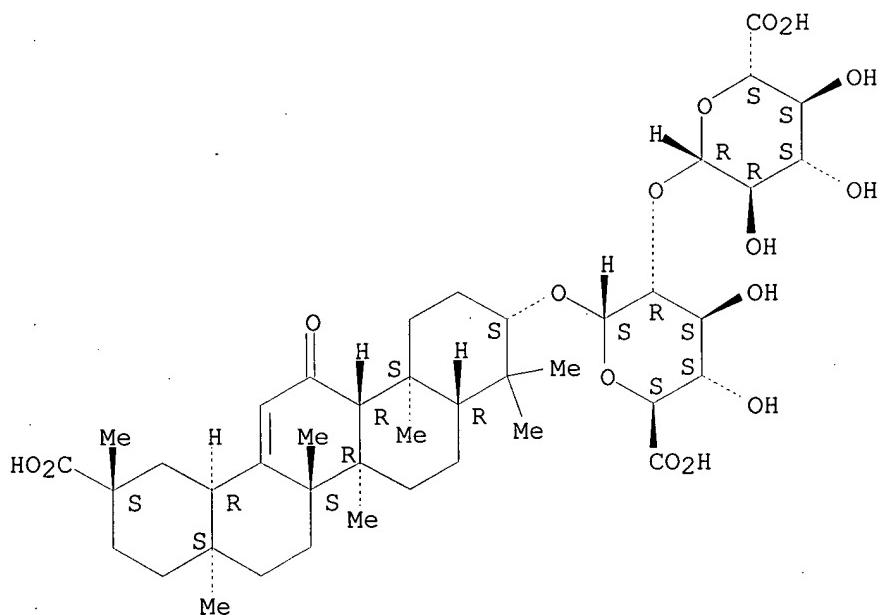


RN 68797-35-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L105 ANSWER 56 OF 114 HCAPLUS COPYRIGHT 2003 ACS
 AN 1996:529717 HCAPLUS
 DN 125:177040
 TI **Dentifrices** containing encapsulated active ingredients and granules
 IN Maeda, Akitsugu; Katayama, Yasushi; Kamimura, Hirohisa; Nakai, Ryozo; Yoshida, Hidenori
 PA Kao Corp, Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-16
 ICS A61K009-50
 CC 62-7 (Essential Oils and Cosmetics)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08169813	A2	19960702	JP 1995-268470	19951017 <--
PRAI JP 1994-252033		19941018 <--		

AB A **dentifrice** comprises (1) 1-10 % of active ingredient-contg. capsules with an av. diam. 0.2-3 mm and (2) 1-50 % of **water-insol.** granules with an av. diam. 50-500 .mu.m, with the wt. ratio of (1)/(2) being 1-2. While brushing **teeth**, component (2) disintegrates, then accelerates breakdown of (1). An aq. soln. contg. gelatins and Na alginate was used to encapsulate a compn. contg. Coconad MT(caprylic acid- and capric acid-contg. glyceride) 40, .beta.-**glycyrrhetic acid** 50, and ethanol 10 %. A **water-insol.** granule was prep'd. by mixing abrasive silica, Al silicate, and colloidal silica. The above obtained capsules and granules were formulated with other ingredients to give a toothpaste.

ST **dentifrice** silica granule encapsulated active ingredient
 IT **Dentifrices**
 (**dentifrices** contg. encapsulated active ingredients and granules)
 IT Bentonite, biological studies
 Kaolin, biological studies
 Zeolites, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (**dentifrices** contg. encapsulated active ingredients and granules)
 IT Beeswax
 (encapsulating agent; **dentifrices** contg. encapsulated active ingredients and granules)
 IT Carnauba wax
 Caseins, biological studies
 Ceresin
 Gelatins, biological studies
 Paraffin waxes and Hydrocarbon waxes, biological studies
 Siloxanes and Silicones, biological studies
 Waxes and Waxy substances
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (encapsulating agent; **dentifrices** contg. encapsulated active ingredients and granules)
 IT Paraffin waxes and Hydrocarbon waxes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (microcryst., encapsulating agent; **dentifrices** contg.

IT encapsulated active ingredients and granules)
 471-34-1, Calcium carbonate, biological studies 546-93-0, Magnesium carbonate 1309-37-1, Red Iron oxide, biological studies 1309-48-4, Magnesium oxide, biological studies 1318-93-0, Montmorillonite, biological studies 1335-30-4D, Aluminosilicic acid, salts 1344-28-1, Alumina, biological studies 7631-86-9, Silica, biological studies 7757-87-1 7758-23-8, Calcium biphosphate 7778-18-9, Calcium sulfate 7790-76-3, Calcium pyrophosphate 10361-03-2, Sodium metaphosphate 12511-31-8 14604-82-1, Calcium triphosphate 21645-51-2, Aluminum hydroxide, biological studies 110119-60-3, Coconad MT
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (dentifrices contg. encapsulated active ingredients and granules)
 IT 112-92-5, Stearyl alcohol 627-83-8, Ethylene glycol distearate 9000-01-5, Arabic gum 9000-07-1, Carrageenan 9002-18-0 , Agar 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid 9003-07-0, Polypropylene 9004-32-4, Sodium carboxymethyl cellulose 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3 , Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-32-7D, Alginic acid, salts 25087-26-7, Polymethacrylic acid 26658-19-5, Sorbitan tristearate 36653-82-4, Cetyl alcohol
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (encapsulating agent; dentifrices contg. encapsulated active ingredients and granules)
 IT 9000-07-1, Carrageenan 9002-18-0, Agar 9004-32-4 , Sodium carboxymethyl cellulose 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-32-7D, Alginic acid, salts
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (encapsulating agent; dentifrices contg. encapsulated active ingredients and granules)
 RN 9000-07-1 HCPLUS
 CN Carrageenan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-18-0 HCPLUS
 CN Agar (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-32-4 HCPLUS
 CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

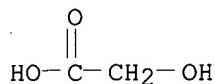
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
 CMF C2 H4 O3



RN 9004-57-3 HCPLUS
 CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

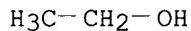
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 64-17-5
 CMF C2 H6 O



RN 9004-62-0 HCPLUS
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

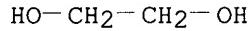
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
 CMF C2 H6 O2



RN 9004-64-2 HCPLUS
 CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

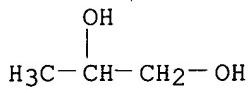
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-65-3 HCPLUS

CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

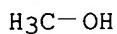
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

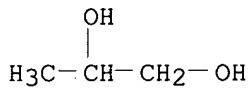
CMF C H4 O



CM 3

CRN 57-55-6

CMF C3 H8 O2



RN 9004-67-5 HCPLUS

CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

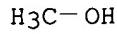
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

CMF C H4 O



RN 9005-32-7 HCPLUS

CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 57 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1996:506289 HCPLUS
 DN 125:150821
 TI Antimicrobial compositions containing lysine, bactericides and surfactants
 IN Tsunemitsu, Akira; Suido, Hirohisa
 PA Sunstar Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K031-195
 ICS A61K007-16; A61K007-18; A61K007-22; A61K007-26; A61K031-05;
 A61K031-085; A61K031-14; A61K031-44; A61K031-77; A61K033-16;
 A61K033-24; A61K035-64; A61K035-78
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63
 FAN.CNT 1

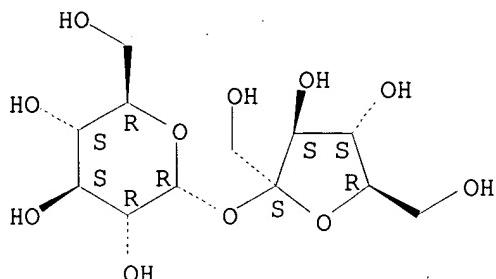
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08151325	A2	19960611	JP 1994-319154	19941128 <--
PRAI	JP 1994-319154		19941128 <--		
AB	Antimicrobial compns. contg. lysine or its derivs., bactericidal compds. and nonionic surfactants and/or amphoteric surfactants are active against biofilm- or plaque-forming microorganisms. A mouthwash contained lysine-HCl 1.0, triclosan 0.2, ethanol 7.0, pluronic 1.0, perfumes 1.0, and purified water to 100 wt.%.				
ST	antimicrobial mouthwash lysine surfactant; nonionic surfactant antimicrobial compn; amphoteric surfactant antimicrobial compn				
IT	Bactericides, Disinfectants, and Antiseptics				
	Mouthwashes				
	Propolis (antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	Chamomile				
	Licorice				
	Tea products (exts.; antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	Mulberry (Morus alba, exts.; antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	Quaternary ammonium compounds, biological studies				
	RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (alkylbenzyldimethyl, chlorides, antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	Pharmaceutical natural products				
	RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aloe, exts.; antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	Surfactants (amphoteric, antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	Tooth (disease, plaque, antimicrobial compns. contg. lysine, bactericides and surfactants for)				
IT	Surfactants (nonionic, antimicrobial compns. contg. lysine, bactericides and surfactants)				
IT	56-87-1, Lysine, biological studies 57-50-1D, Sucrose, fatty acid esters 89-83-8, Thymol 107-43-7D, Betaine, coco fatty acid amidopropyl 123-03-5, Cetylpyridinium chloride 657-27-2, Lysine hydrochloride 3380-34-5, Triclosan 7681-49-4, Sodium				

fluoride (NaF), biological studies 27073-41-2 39660-61-2, Isopropyl methylphenol 55128-73-9, Tin fluoride 106392-12-5, Pluronic RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antimicrobial compns. contg. lysine, bactericides and surfactants)

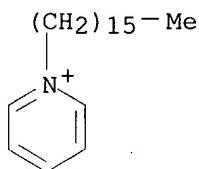
IT 57-50-1D, Sucrose, fatty acid esters 123-03-5,
Cetylpyridinium chloride
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antimicrobial compns. contg. lysine, bactericides and surfactants)

RN 57-50-1 HCPLUS
 CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl⁻

L105 ANSWER 58 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1996:506288 HCPLUS
 DN 125:150820
 TI Antimicrobial compositions containing arginine, bactericides and surfactants
 IN Tsunemitsu, Akira; Suido, Hirohisa
 PA Sunstar Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K031-195
 ICS A61K007-16; A61K007-18; A61K007-26; A61K031-045; A61K031-085;
 A61K031-14; A61K031-155; A61K031-22; A61K031-44; A61K031-70;
 A61K031-77; A61K033-16; A61K033-24; A61K035-64; A61K035-78;
 A61K045-00
 ICI A61K031-085, A61K031-195; A61K031-155
 CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08151324	A2	19960611	JP 1994-319152	19941128 <--
PRAI	JP 1994-319152		19941128 <--		
AB	Antimicrobial compns. contg. arginine or its derivs., bactericidal compds. and nonionic surfactants and/or amphoteric surfactants are active against biofilm- or plaque -forming microorganisms. A mouthwash contained arginine-HCl 1.0, cetylpyridinium chloride 0.2, ethanol 7.0, pluronic 1.0, perfumes 1.0, and purified water to 100 wt.%.				
ST	antimicrobial mouthwash arginine surfactant; dentifrice antimicrobial arginine surfactant; nonionic surfactant antimicrobial compn; amphoteric surfactant antimicrobial compn				
IT	Bactericides, Disinfectants, and Antiseptics				
	Mouthwashes				
	Propolis				
	(antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	Dentifrices				
	(antimicrobial compns. contg. arginine, bactericides and surfactants for)				
IT	Chamomile				
	Licorice				
	Tea products				
	(exts.; antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	Mulberry				
	(<i>Morus alba</i> , exts.; antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	Quaternary ammonium compounds, biological studies				
	RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(alkylbenzyldimethyl, chlorides, antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	Pharmaceutical natural products				
	RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(aloe, exts.; antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	Surfactants				
	(amphoteric, antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	Tooth				
	(disease, plaque , antimicrobial compns. contg. arginine, bactericides and surfactants for)				
IT	Surfactants				
	(nonionic, antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	57-50-1D, Sucrose, fatty acid esters 74-79-3, Arginine, biological studies 89-83-8, Thymol 107-43-7D, Betaine, coco fatty acid amidopropyl 123-03-5, Cetylpyridinium chloride 1119-34-2, Arginine hydrochloride 1189-11-3, Arginine phosphate 2577-94-8, Arginine methyl ester 3380-34-5, Triclosan 4320-30-3, Arginine glutamate 7681-49-4, Sodium fluoride, biological studies 27073-41-2 28696-31-3, Arginine ethyl ester 39660-61-2, Isopropyl methylphenol 55128-73-9, Tin fluoride 106392-12-5, Pluronic RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(antimicrobial compns. contg. arginine, bactericides and surfactants)				
IT	57-50-1D, Sucrose, fatty acid esters 123-03-5, Cetylpyridinium chloride				
	RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL				

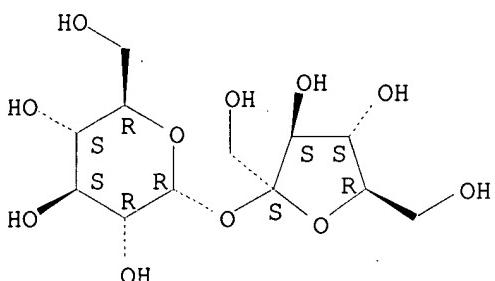
(Biological study); USES (Uses)

(antimicrobial compns. contg. arginine, bactericides and surfactants)

RN 57-50-1 HCPLUS

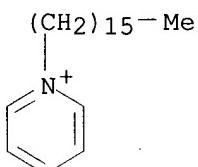
CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)

● Cl⁻

L105 ANSWER 59 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1996:256310 HCPLUS

DN 124:298471

TI Dentifrice compositions containing glycyrrhetic acid or glycyrrhizinic acid salts and taurine

IN Kazuno, Keiko; Nagahata, Tetsuji

PA Lion Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)
Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08040858	A2	19960213	JP 1994-196075	19940728 <--
JP 3329082	B2	20020930		

PRAI JP 1994-196075 19940728 <--

AB The compns. prevent one-set and progression of gingivitis and are useful for prophylaxis and therapy for periodontal disease.

A compn contg. EtOH 28, Carbopol 1.5, propylene glycol 55, .beta.-glycyrrhetic acid 0.5, taurine (I) 1 wt.%, and H₂O

balance was applied to gingiva with inflammation in ODU rats twice a day for 2 wk to show inflammatory area-reducing rate 51.4%, vs.

26.3 for a control contg. no I. A **mouthwash** contg. 0.5 wt.% .beta.-**glycyrrhizinate** dipotassium and 0.5 wt.% I was also prep'd.

ST **glycyrrhetic acid** taurine antiinflammatory dentifrice; **glycyrrhizinate** salt taurine antiinflammatory dentifrice

IT **Dentifrices**
Inflammation inhibitors
Mouthwashes
(dentifrices contg. **glycyrrhetic acid** or **glycyrrhizinic acid** salts and taurine for periodontal diseases)

IT **Periodontium**
(disease, dentifrices contg. **glycyrrhetic acid** or **glycyrrhizinic acid** salts and taurine for periodontal diseases)

IT 176036-45-6 176036-46-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dentifrices contg. **glycyrrhetic acid** or **glycyrrhizinic acid** salts and taurine for periodontal diseases)

L105 ANSWER 60 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:200424 HCAPLUS

DN 124:270032

TI Tasteful **toothpaste** and other **dental products** containing a ternary surfactant system of poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers

IN Cutler, Edward T.

PA Pilot Research and Development Co., USA

SO U.S., 7 pp., Cont.-in-part of U.S. Ser. No. 260,349, abandoned.
CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-16

ICS A61K007-22

NCL 424050000

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5496541	A	19960305	US 1995-379260	19950127 <--
PRAI	US 1993-5341	B2	19930119 <--		
	US 1994-260349	B2	19940615 <--		

AB The title **dental products** are claimed. The ternary surfactant system has greatly enhanced foaming power relative to poloxamers alone or to poloxamers plus anionic **polysaccharides** or to poloxamers plus nonionic cellulose ethers. The poloxamer-anionic **polysaccharide**-nonionic cellulose ether surfactant system has little or no taste, is nonirritating, and has excellent adhesion to tooth surfaces and oral mucosa. Inclusion of a mild abrasive plus one or more of xylitol, raw licorice, licorice ext., and **glycyrrhizin** and its derivs. enhances the clin. efficacy of the formulations by further reducing **plaque** buildup thus brightening **teeth** and reducing **tooth decay** and **periodontal disease**. The surfactant system can be used in a **dentifrice** paste or gel, powder, granules, disintegrable tablet, and a **mouthwash**, lozenge, and chewing gum. A **dentifrice** contained calcium carbonate 50.0, xylitol 31.0, microcryst. cellulose 14.6, Pluronic F127 2.0, xanthan gum 1.0, Methocel K15MP 0.5, flavor 0.5, and monoammonium **glycyrrhizinate**.

- ST toothpaste surfactant poloxamer anionic **polysaccharide**; dental product nonionic cellulose ether poloxamer; dentifrice Pluronic F127 Methocel K15MP tasteful
- IT Abrasives
Antioxidants
Beeswax
Chicle
Dentifrices
Humectants
Lubricants
Mouthwashes
Surfactants
Sweetening agents
(tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT **Polysaccharides, biological studies**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(acidic, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT **Dentifrices**
(chewing gums, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT **Dentifrices**
(gels, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT Pharmaceutical natural products
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(licorice, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT **Dentifrices**
(lozenges, **antiplaque**, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(polyhydric, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT **Dentifrices**
(tablets, **anticalculus**, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT Fats and Glyceridic oils
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(vegetable, hydrogenated, tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT 9004-34-6, Cellulose, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(colloidal; tasteful dental products contg. poloxamers, anionic **polysaccharides**, and nonionic cellulose ethers)
- IT 50-70-4, Sorbitol, biological studies 50-81-7, Ascorbic acid, biological studies 56-81-5, Glycerol, biological studies 59-02-9 60-00-4, Ethylenediaminetetraacetic acid, biological studies 69-65-8, Mannitol

77-92-9, Citric acid, biological studies 81-07-2, Saccharin 87-99-0,
 Xylitol 99-96-7, Paraben, biological studies 471-34-1, Calcium
 carbonate, biological studies 557-04-0, Magnesium stearate 1306-05-4,
 Fluorapatite 1306-06-5, Hydroxyapatite 1344-28-1, Alumina, biological
 studies 1405-86-3, **Glycyrrhizin** 1592-23-0, Calcium
 stearate 7235-40-7, Beta carotene 7631-86-9, Silica, biological
 studies 7631-97-2, Sodium monofluorophosphate 7664-93-9, Sulfuric
 acid, biological studies 7681-49-4, Sodium fluoride, biological studies
 7757-93-9, Dicalcium phosphate 7758-87-4, Tricalcium phosphate
 7790-76-3, Calcium pyrophosphate 9000-01-5, Gum arabic 9000-07-1
 , Carrageenan 9000-36-6, Karaya gum 9000-65-1, Gum
 tragacanth 9000-69-5, Pectin 9003-29-6, Polybutene
 9003-39-8, Pvp 9004-32-4, Carboxymethyl cellulose
 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl
 cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3
 , Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose
 9005-32-7, Alginic acid 11138-66-2, Xanthan gum
 13463-67-7, Titania, biological studies 16984-48-8, Fluoride, biological
 studies 22839-47-0, Aspartame 24634-61-5, Potassium sorbate
 25322-68-3, Peg 106392-12-5, Pluronic F127
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(tasteful dental products contg. poloxamers,
 anionic polysaccharides, and nonionic cellulose ethers)

IT 9004-34-6, Cellulose, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(colloidal; tasteful dental products contg.
 poloxamers, anionic polysaccharides, and nonionic cellulose
 ethers)

RN 9004-34-6 HCPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 1405-86-3, **Glycyrrhizin** 9000-07-1, Carrageenan
 9000-36-6, Karaya gum 9000-65-1, Gum tragacanth
 9000-69-5, Pectin 9004-32-4, Carboxymethyl cellulose
 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl
 cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3
 , Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose
 9005-32-7, Alginic acid 11138-66-2, Xanthan gum

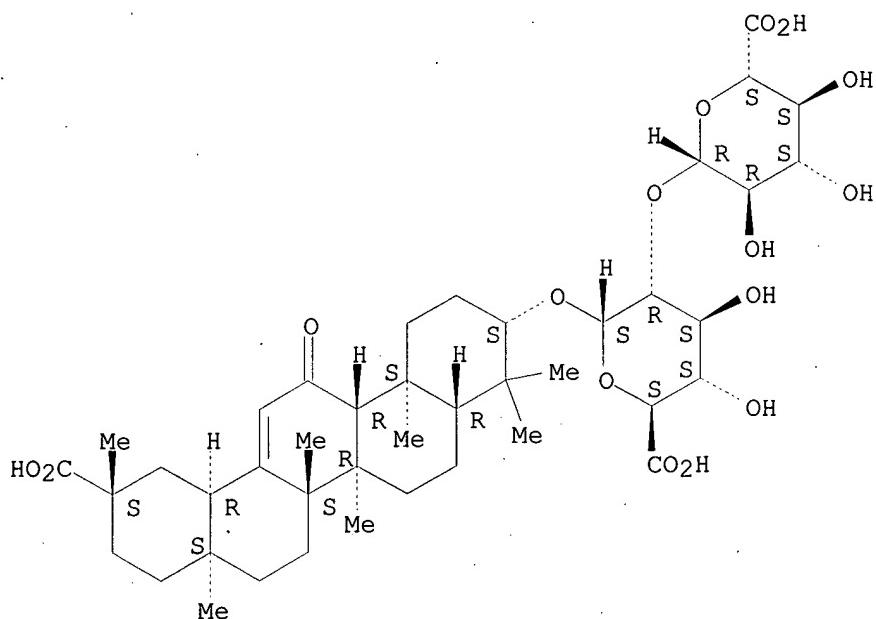
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(tasteful dental products contg. poloxamers,
 anionic polysaccharides, and nonionic cellulose ethers)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



RN 9000-07-1 HCPLUS
 CN Carrageenan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-36-6 HCPLUS
 CN Karaya gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-65-1 HCPLUS
 CN Gum tragacanth (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9000-69-5 HCPLUS
 CN Pectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9004-32-4 HCPLUS
 CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

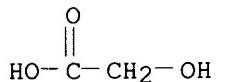
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
 CMF C2 H4 O3



RN 9004-57-3 HCAPLUS
 CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

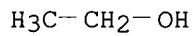
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 64-17-5
 CMF C2 H6 O



RN 9004-62-0 HCAPLUS
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

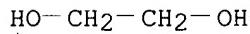
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
 CMF C2 H6 O2



RN 9004-64-2 HCAPLUS
 CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

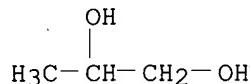
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6
 CMF C3 H8 O2



RN 9004-65-3 HCAPLUS

CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

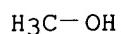
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

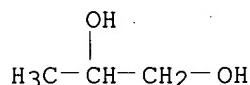
CMF C H4 O



CM 3

CRN 57-55-6

CMF C3 H8 O2



RN 9004-67-5 HCPLUS

CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

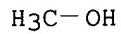
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

CMF C H4 O



RN 9005-32-7 HCPLUS

CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 11138-66-2 HCPLUS

CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 61 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1996:194804 HCPLUS

DN 124:241818

TI **Mouthwashes** or other oral liquid compositions containing gellan gum and nonionic surfactants to improve stability
 IN Okumura, Kenji; Saito, Tooru; Ootsuki, Hidehiko
 PA **Sunstar Kk, Japan**
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF

DT **Patent**
 LA Japanese
 IC ICM A61K047-36
 ICS A61K007-16; A61K007-18; A61K009-08; A61K031-015; A61K031-045;
 A61K031-05; A61K031-055; A61K031-14; A61K031-155; A61K031-19;
 A61K031-355; A61K031-415; A61K031-455; A61K031-575; A61K031-705;
 A61K033-14; A61K045-00

CC **62-7 (Essential Oils and Cosmetics)**
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08003074	A2	19960109	JP 1994-138609	19940621 <--
PRAI	JP 1994-138609		19940621 <--		

AB **Mouthwashes** or other oral liq. compns. contain gellan gum and nonionic surfactants in addn. to other ingredients to improve gellan gum stability and to prolong active ingredient retention time. A **mouthwash** contained tocopherol nicotinate 0.05, gellan gum 0.2, ethoxylated castor oil 0.5, ethanol 5.0, sodium dihydrogen phosphate 0.01, sodium monohydrogen phosphate 0.01, glycerin 13, sodium saccharin 0.01, perfumes 0.3, and water to 100 parts.

ST **mouthwash** gellan gum nonionic surfactant
 IT **Dentifrices**
 (liq.; **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Bactericides, Disinfectants, and Antiseptics
 Inflammation inhibitors
 Mouthwashes
 (**mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Circulation
 (promoters; **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Quaternary ammonium compounds, biological studies
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkylbenzyldimethyl, chlorides, **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Castor oil
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (ethoxylated, **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Castor oil
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hydrogenated, **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Surfactants
 (nonionic, **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT Cosmetics
 (sprays, oral; **mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)
 IT 56-81-5D, Glycerin, fatty acid esters 57-50-1D, Sucrose, fatty acid esters 120-40-1, Lauric acid diethanolamide 7782-41-4D, Fluorine,

compds. 9003-11-6D, Ethylene oxide-propylene oxide copolymer, phytosterol and phytostanol ethers 9005-63-4D, Polyoxyethylene sorbitan, fatty acid esters 9016-45-9, Polyoxyethylene nonylphenyl ether 12441-09-7D, Sorbitan, fatty acid esters 25322-68-3D, alkyl ether phosphate 25322-68-3D, alkyl ether sulfates 25322-68-3D, alkyl ethers 25322-68-3D, alkylphenyl deriv., formaldehyde condensation products with 25322-68-3D, alkylphenyl ether phosphate 25322-68-3D, lanolin and lanolin alc. derivs. 25322-68-3D, phytosterol and phytostanol ethers 25618-55-7D, Polyglycerin, fatty acid esters 31694-55-0D, Polyoxyethylene glycerol, fatty acid esters 53694-15-8D, Polyoxyethylene sorbitol, fatty acid esters 71010-52-1, Gellan gum
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)

IT 55-56-1, Chlorhexidine 58-95-7, .alpha.-Tocopherol acetate 60-32-2, .epsilon.-Aminocaproic acid 80-97-7, Dihydrocholesterol 89-83-8, Thymol 97-59-6, Allantoin 121-54-0, Benzethonium chloride 123-03-5, **Cetylpyridinium chloride** 275-51-4, Azulene 471-53-4, **Glycyrrhetic acid** 499-44-5, Hinokitiol 516-95-0 1197-18-8, Tranexamic acid 1405-86-3, **Glycyrrhizinic acid** 3380-34-5, Triclosan 7631-97-2, Sodium monofluorophosphate 7647-14-5, Sodium chloride, biological studies 7681-49-4, Sodium fluoride, biological studies 7783-47-3, Stannous fluoride 39660-61-2, Isopropylmethyl phenol 43119-47-7, Tocopherol nicotinate
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

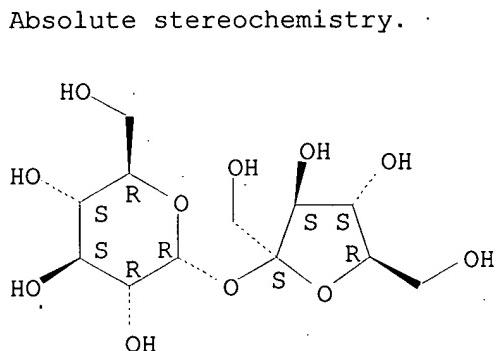
(**mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)

IT 57-50-1D, Sucrose, fatty acid esters 71010-52-1, Gellan gum
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**mouthwashes** or other oral liq. compns. contg. gellan gum and nonionic surfactants to improve stability)

RN 57-50-1 HCPLUS

CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)



RN 71010-52-1 HCPLUS

CN Gellan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 123-03-5, **Cetylpyridinium chloride**

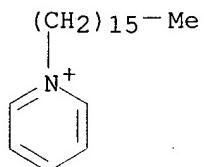
471-53-4, **Glycyrrhetic acid**

1405-86-3, **Glycyrrhizinic acid**

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**mouthwashes** or other oral liq. compns. contg. gellan gum and

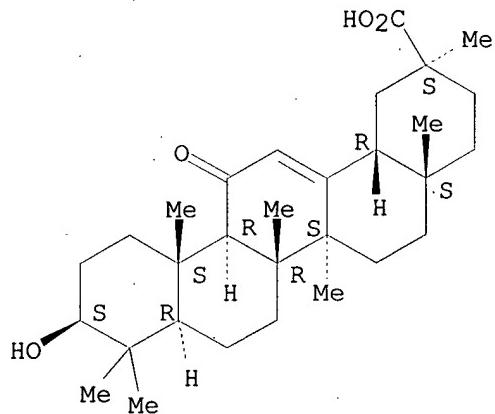
RN 123-03-5 HCAPLUS
CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl⁻

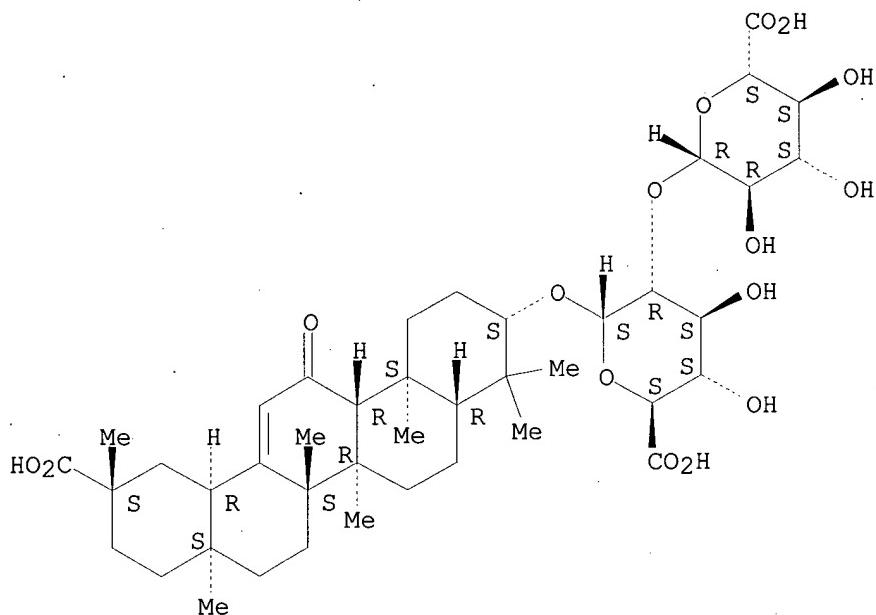
RN 471-53-4 HCPLUS
CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 1405-86-3 HCPLUS
CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



L105 ANSWER 62 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1996:11024 HCAPLUS

DN 124:37414

TI Oral compositions for periodontal disease control

IN Nakai, Ryozo; Maeda, Akitsugu; Yoshida, Hidenori; Eguchi, Yasuteru

PA Kao Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICS A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07258052	A2	19951009	JP 1994-49458	19940318 <--
	JP 3241923	B2	20011225		

PRAI JP 1994-49458 19940318 <--

AB Oral compns. for periodontal disease control

comprise sodium chloride, sodium bicarbonate, and antiinflammatory agents such as **glycyrrhetic acid**. Thus, a **dentifrice** contained sodium chloride (av. particle size = 250. μ m) 15.0, sodium bicarbonate (av. particle size = 100. μ m) 15.0, sorbitol 14.0, glycerin 8.0, Na CM-cellulose 1.5, Na laurylsulfate 2.0, Na saccharin 0.1, Al(OH)₃ 40.0, .beta.-**glycyrrhetic acid** 0.01, perfumes 0.8, and water to 100 wt.%.

ST oral compn periodontal disease;
dentifrice bicarbonate salt antiinflammatory periodontal disease

IT Angelica sinensis

Chamomile

Ligusticum chuanxiong

(exts.; oral compns. for periodontal disease control)

IT **Dentifrices**

Inflammation inhibitors
 (oral compns. for periodontal disease control)

IT **Periodontium**

(disease, oral compns. for periodontal disease control)

IT 471-34-1, Calcium carbonate, biological studies 1335-30-4, Aluminum silicate 1343-98-2, Silicic acid 1344-28-1, Alumina, biological studies 1344-95-2, Calcium silicate 21645-51-2, Aluminum hydroxide, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(abrasive; oral compns. for periodontal disease control)

IT 144-55-8, Sodium bicarbonate, biological studies 7647-14-5, Sodium chloride, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oral compns. for periodontal disease control)

IT 50-81-7D, Ascorbic acid, derivs. 80-97-7, Dihydrocholesterol 97-59-6,

Allantoin 275-51-4, Azulene 471-53-4, Glycyrrhetic acid

acid 516-95-0 1405-86-3, Glycyrrhizinic acid

acid 1449-05-4, .beta.-Glycyrrhetic acid

9066-59-5, Lysozyme chloride

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral compns. for periodontal disease control)

IT 471-53-4, Glycyrrhetic acid

1405-86-3, Glycyrrhizinic acid

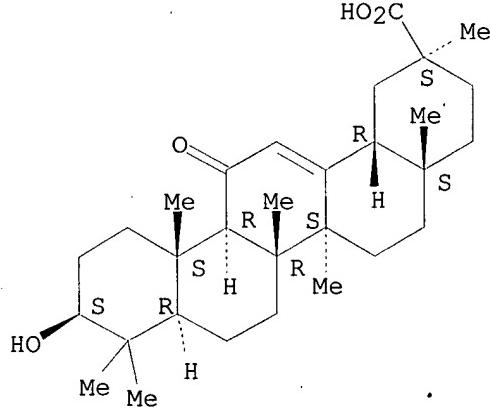
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral compns. for periodontal disease control)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.beta.,20.beta.)- (9CI) (CA INDEX NAME)

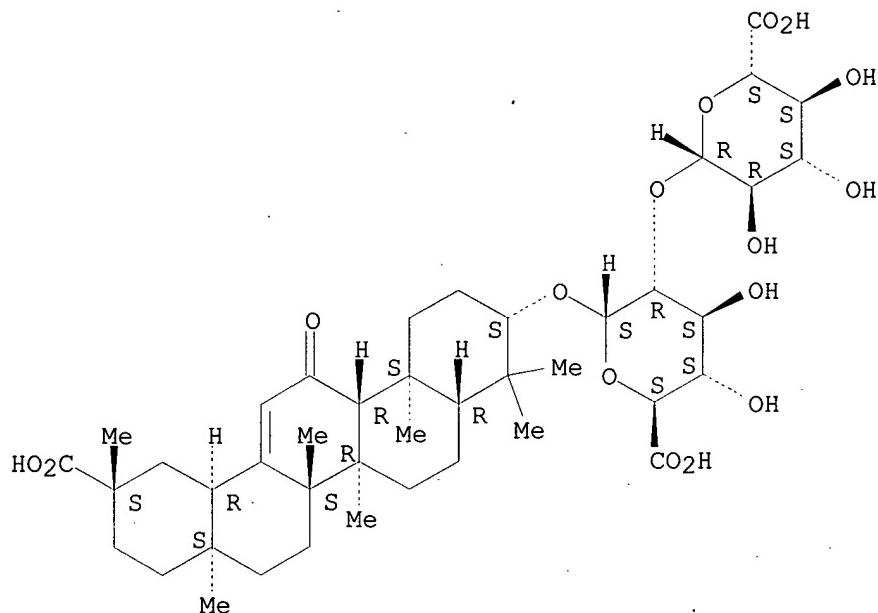
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 63 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1995:777841 HCPLUS

DN 123:179454

TI Pharmaceutical or cosmetic compositions containing **zinc glycyrrhetinate** or **zinc glycyrrhizinate** as hemostatic or astringent

IN Masui, Katsunobu

PA Toyo Byuutei Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C07H015-256

ICS A61K007-00; A61K007-48; A61K031-70

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 62

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 07149787	A2	19950613	JP 1993-298038	19931129 <--

PRAI JP 1993-298038 19931129 <--

AB Pharmaceutical or cosmetic compns. contain **zinc glycyrrhetinate** or **zinc glycyrrhizinate** as hemostatic or astringent.

Zinc glycyrrhetinate or **zinc glycyrrhizinate**

also is a binder for solid prepns. (e.g. tablets). A hemostatic ointment contained **zinc glycyrrhetinate** 250, **zinc glycyrrhizinate** 50, and ointment bases 700 parts.

ST pharmaceutical cosmetic **zinc glycyrrhetinate**; **glycyrrhizinate zinc** hemostatic astringent

IT Antiperspirants

Astringents

Cosmetics

Dentifrices

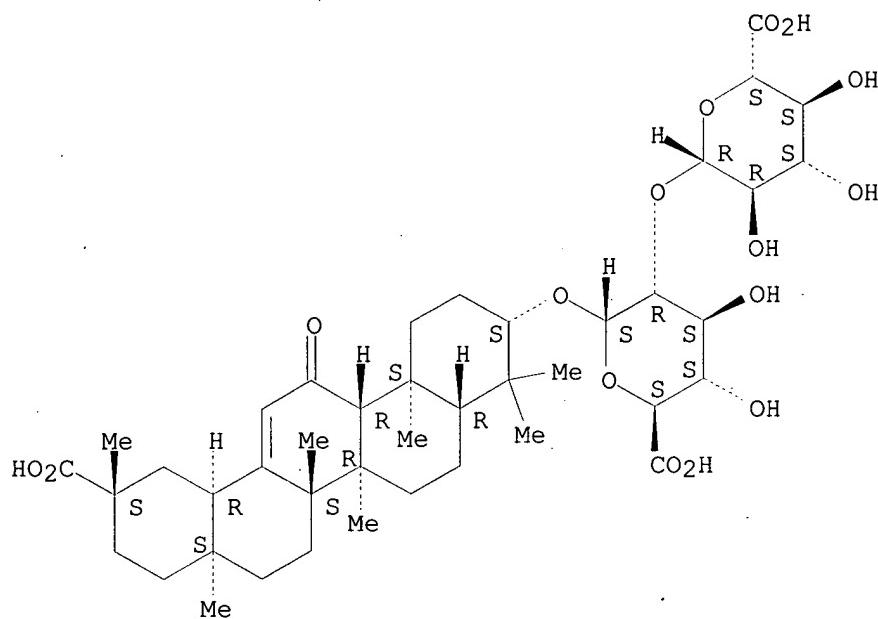
Hemostatics

(pharmaceutical or cosmetic compns. contg. **zinc**

- glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Cosmetics
(creams, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Cosmetics
(lotions, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Pharmaceutical dosage forms
(ointments, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Cosmetics
(packs, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Pharmaceutical dosage forms
(powders, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Pharmaceutical dosage forms
(suppositories, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT Pharmaceutical dosage forms
(tablets, pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT 85441-51-6P, Zinc **glycyrrhizinate**
167381-99-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- IT 85441-51-6P, Zinc **glycyrrhizinate**
167381-99-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pharmaceutical or cosmetic compns. contg. zinc
glycyrrhetinate or zinc **glycyrrhizinate** as
hemostatic or astringent)
- RN 85441-51-6 HCPLUS
CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O-. β -D-glucopyranuronosyl-, zinc salt (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



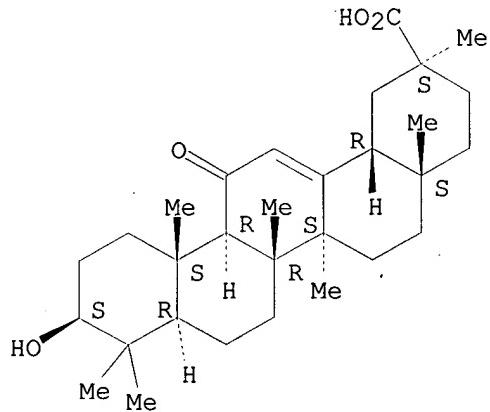
PAGE 2-A

● x Zn

RN 167381-99-9 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, zinc salt, (3. β .,20. β .)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



x Zn

AN 1995:767952 HCAPLUS
 DN 123:152627
 TI **Dentifrices** containing **glycyrrhetic acid**
 and sodium or potassium hydrogen carbonate for prevention of
periodontal diseases
 IN Yoshe, Makoto; Kojima, Nobuo; Ono, Fujio
 PA Lion Corp, Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-16
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07165545	A2	19950627	JP 1993-342548	19931214 <--
PRAI	JP 1993-342548		19931214 <--		

AB **Dentifrices** contg. **glycyrrhetic acid (I)**
 or its derivs. and NaHCO₃ and/or KHCO₃ are claimed. The
dentifrices may addnl. contain alcs. NaHCO₃ or KHCO₃ prevents a
lowering of antiedema action of I caused by interaction with base
materials, e.g. Ca phosphate, polymers, cationic ingredients and the
dentifrices show high efficacy in prevention and treatment of
periodontal diseases. **Dentifrices** contg. .beta.-I and
NaHCO₃ or KHCO₃ were formulated.

ST **dentifrice** glycyrrhetinate alkali bicarbonate; sodium
 bicarbonate glycyrrhetinate **dentifrice**; potassium bicarbonate
 glycyrrhetinate **dentifrice**; **periodontal** disease
 glycyrrhetinate **dentifrice**

IT **Dentifrices**
 (**dentifrices** contg. **glycyrrhetinate acid**
 and bicarbonates for **periodontal** diseases treatment)

IT **Periodontium**
 (disease, **dentifrices** contg. **glycyrrhetinate**
 acid and bicarbonates for **periodontal** diseases
 treatment)

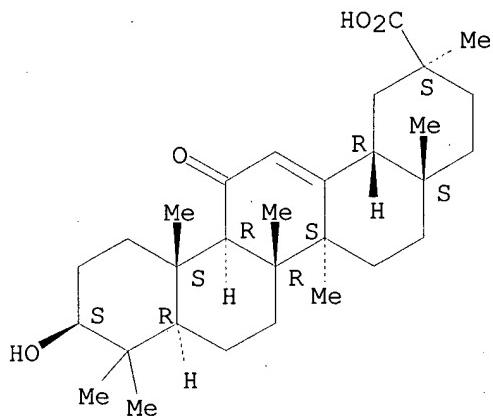
IT 471-53-4, **Glycyrrhetic acid** 1449-05-4,
 .beta.-**Glycyrrhetic acid**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
 use); BIOL (Biological study); USES (Uses)
 (**dentifrices** contg. **glycyrrhetinate acid**
 and bicarbonates for **periodontal** diseases treatment)

IT 144-55-8, Sodium hydrogen carbonate, biological studies 298-14-6
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (**dentifrices** contg. **glycyrrhetinate acid**
 and bicarbonates for **periodontal** diseases treatment)

IT 471-53-4, **Glycyrrhetic acid**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
 use); BIOL (Biological study); USES (Uses)
 (**dentifrices** contg. **glycyrrhetinate acid**
 and bicarbonates for **periodontal** diseases treatment)

RN 471-53-4 HCAPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.beta.,20.beta.)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 65 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1995:501580 HCPLUS

DN 122:282162

TI The inhibitory effect of gymnemic acid and **glycyrrhizin** on caries formation in teeth of young rats and isolated human teeth

AU Watanabe, Takao

CS Fac. Med., Tottori Univ., Yonago, 683, Japan

SO Yonago Igaku Zasshi (1995), 46(2), 299-318

CODEN: YOIZA3; ISSN: 0044-0558

DT Journal

LA Japanese

CC 1-12 (Pharmacology)

AB Anti-caries effect of gymnemic acid (GA), a sweet taste suppressing substance in men, on caries formation induced by **Streptococcus mutans** was investigated and compared with those given by **glycyrrhizin** (GR) in teeth of rats and isolated teeth of humans. To aim at clin. application., effects of coexistence of various cyclodextrins (CD) were further studied on both the inhibitory effect on sweet taste sensation and anti-caries effect of GA and GR. It was shown in the study using young rats that GA inhibited glucan synthesis in **S. mutans** and then was effective to suppress the caries formation. GA inhibited significantly plaque formation on isolated teeth of men. Recovery times of sweet sensation to sucrose were measured in men after treating the tongue with equimol. mixt. of GA and CDs. The suppressed sweet taste sensation was recovered slightly faster in the presence of .gamma.-CD than it was in GA alone, while .alpha.-CD and .beta.-CD did not affect the recovery time at all. Threshold concn. of sweet taste elicited by GR was compared with that in the presence of equimol. CDs. Among 3 kinds of CDs, only .gamma.-CD raised the threshold slightly. The presence of .gamma.-CD weakened the inhibitory effect of GA on the plaque formation, whereas .alpha.-CD and .beta.-CD did not show any effects. In case of GR, no significant effect of CDs was obsd.

ST gymnemic acid **glycyrrhizin** tooth caries inhibition; cyclodextrin gymnemic acid **glycyrrhizin** tooth caries

IT **Streptococcus mutans**

(caries induced by; inhibitory effect of gymnemic acid and **glycyrrhizin** on caries formation in teeth and plaque formation in isolated teeth of men)

IT Gymnemic acids

RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); BIOL (Biological study);
PROC (Process)

(inhibitory effect of gymnemic acid and **glycyrrhizin** on
caries formation in **teeth** and **plaque**
formation in isolated **teeth** of men)

IT **Tooth**

(disease, **caries**, **Streptococcus mutans**
-induced; inhibitory effect of gymnemic acid and **glycyrrhizin**
on **caries** formation in **teeth** and **plaque**
formation in isolated **teeth** of men)

IT **Tooth**

(disease, **plaque**, inhibitory effect of gymnemic acid and
glycyrrhizin on **caries** formation in **teeth**
and **plaque** formation in isolated **teeth** of men)

IT **7585-39-9, .beta.-Cyclodextrin 10016-20-3,**

.alpha.-Cyclodextrin 17465-86-0, .gamma.-Cyclodextrin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)

(effect of cyclodextrin coexistence on inhibitory effect of sweet taste
and **caries** formation of gymnemic acid and
glycyrrhizin)

IT **1405-86-3, Glycyrrhizin**

RL: BAC (Biological activity or effector, except adverse); BPR (Biological
process); BSU (Biological study, unclassified); BIOL (Biological study);
PROC (Process)

(inhibitory effect of gymnemic acid and **glycyrrhizin** on
caries formation in **teeth** and **plaque**
formation in isolated **teeth** of men)

IT **7585-39-9, .beta.-Cyclodextrin 10016-20-3,**

.alpha.-Cyclodextrin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)

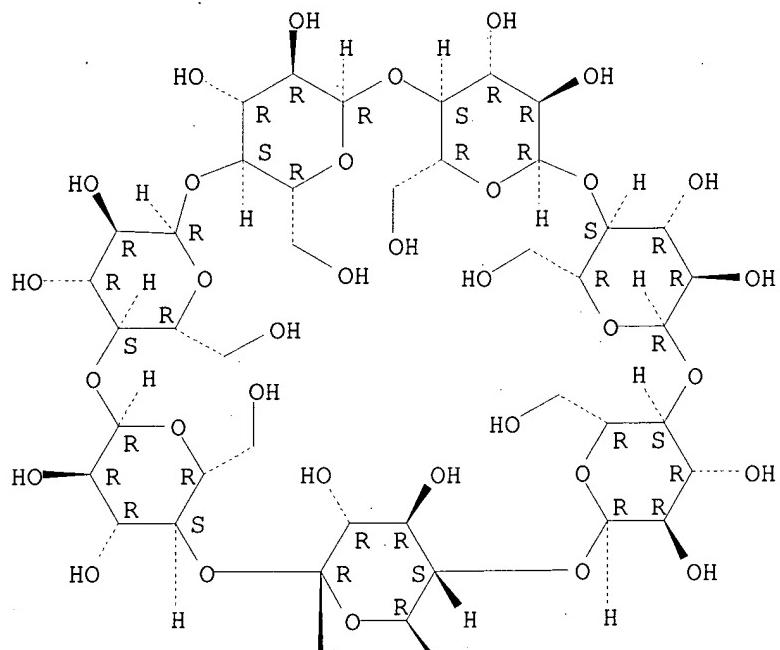
(effect of cyclodextrin coexistence on inhibitory effect of sweet taste
and **caries** formation of gymnemic acid and
glycyrrhizin)

RN 7585-39-9 HCPLUS

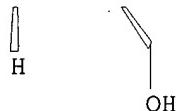
CN .beta.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

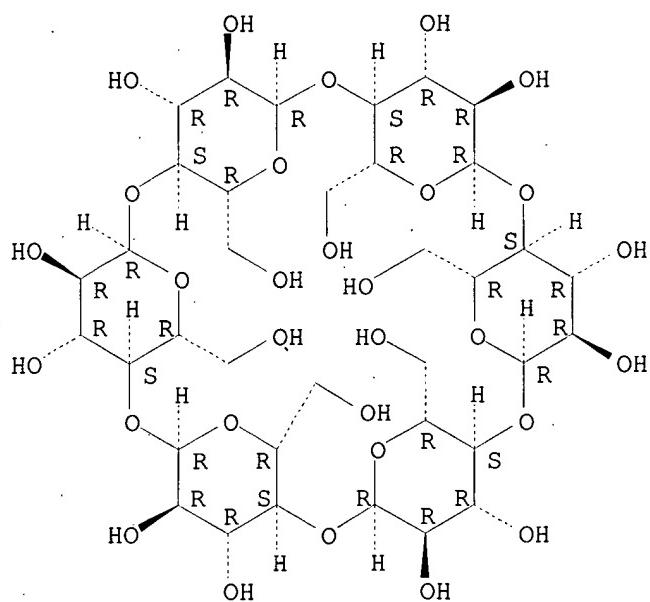


PAGE 2-A



RN 10016-20-3 HCPLUS
 CN .alpha.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 1405-86-3, Glycyrrhizin

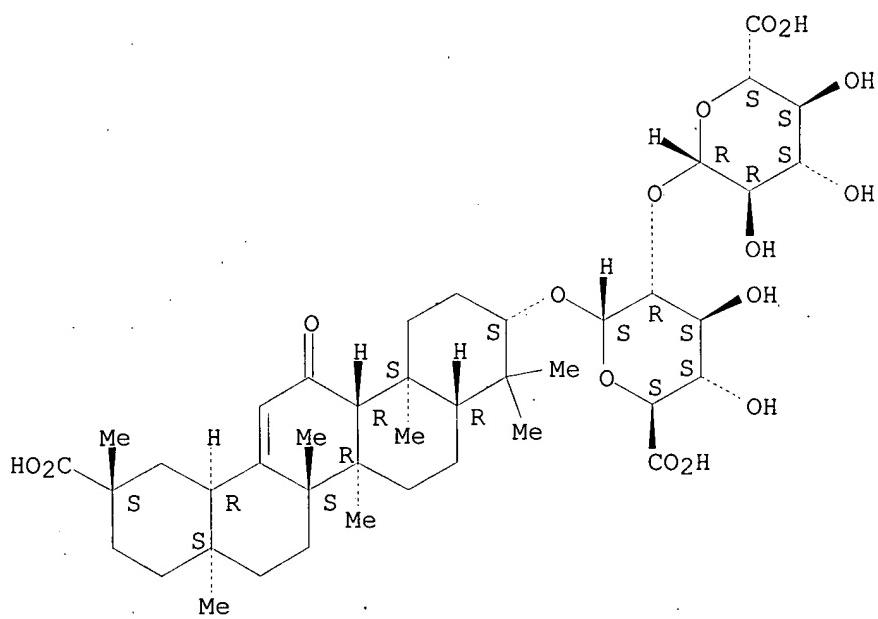
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(inhibitory effect of gymnemic acid and glycyrrhizin on caries formation in teeth and plaque formation in isolated teeth of men)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 66 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1995:490086 HCPLUS
 DN 122:222504
 TI **dentifrice** containing powdered tea for controlling
gingivitis
 IN Enohara, Tetsushi; Yamane, Kazuko; Fujiwara, Hiromi; Naeshiro, Hidekazu;
 Watanabe, Hajime
 PA Sunstar Kk, Japan; Takasago Perfumery Co Ltd
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07033632	A2	19950203	JP 1993-199100	19930716 <--
	JP 3287658	B2	20020604		

PRAI JP 1993-199100 19930716 <--

AB **Dentifrices** for controlling **gingivitis** contain powd. tea (comprising catechins, flavones, and other substances), plant exts. (such as Sapindus exts.) as foaming agents, liquorice or other plant exts. as sweeteners, and glycerol. The preps. are safe and effective.

ST **dentifrice** tea catechin flavone **gingivitis**

IT **Dentifrices**

Tea products
 (**dentifrice** contg. powd. tea for controlling
gingivitis)

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**dentifrice** contg. powd. tea for controlling
gingivitis)

IT **Gingiva**

(disease, **gingivitis**, **dentifrice** contg. powd. tea
 for controlling **gingivitis**)

IT Flavonoids

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxo, **dentifrice** contg. powd. tea for controlling
gingivitis)

IT 56-81-5P, 1,2,3-Propanetriol, biological studies

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**dentifrice** contg. powd. tea for controlling
gingivitis)

L105 ANSWER 67 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1995:488005 HCPLUS

DN 122:222498

TI Starch pastes as **dentifrices** for use without **water**

IN Takahashi, Jusaku

PA Takahashi Jusaku, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICS A23L001-48; A61K007-26
 CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07002638	A2	19950106	JP 1992-185644	19920603 <--
	JP 2565454	B2	19961218		

PRAI JP 1992-185644 19920603 <--

AB A **dentifrice** suitable for use in a certain occasion in which water supply is limited, comprises pastes contg. starch and sweetening agents. After **teeth** are brushed with the paste, the secreted saliva during brushing and the paste are removed using the tissue paper or cloth.

ST starch paste sweetener **dentifrice**

IT **Dentifrices**

Sweetening agents

(sweetened starch pastes as **dentifrices** for use without water)

IT Monellins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(sweetened starch pastes as **dentifrices** for use without water)

IT 585-86-4, Lactitol 585-88-6, Maltitol 1405-86-3,

Glycyrrhizinic acid 9005-25-8, Starch, biological studies 22839-47-0, Aspartame 27026-37-5, Polygalactose 37383-89-4, Polylactose 53124-00-8, Hydroxypropyl distarch phosphate 56649-78-6, Sodium **Glycyrrhizinate** 57817-89-7, Stevioside 76775-40-1, Somatin

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(sweetened starch pastes as **dentifrices** for use without water)

IT 585-86-4, Lactitol 1405-86-3, **Glycyrrhizinic acid** 9005-25-8, Starch, biological studies

56649-78-6, Sodium **Glycyrrhizinate**

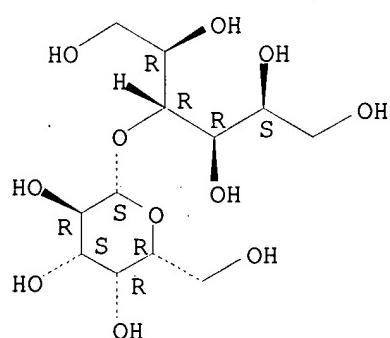
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(sweetened starch pastes as **dentifrices** for use without water)

RN 585-86-4 HCPLUS

CN D-Glucitol, 4-O-.beta.-D-galactopyranosyl- (9CI) (CA INDEX NAME)

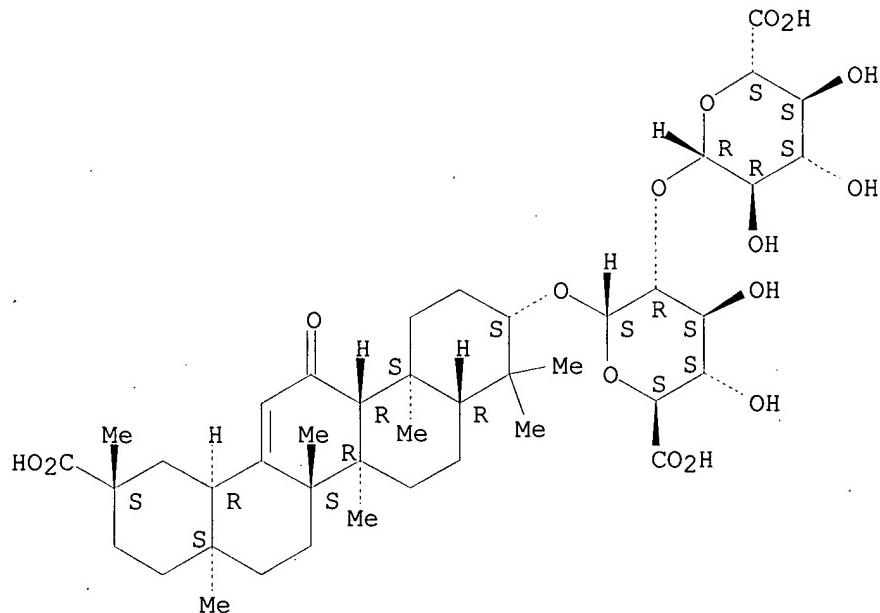
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9005-25-8 HCPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

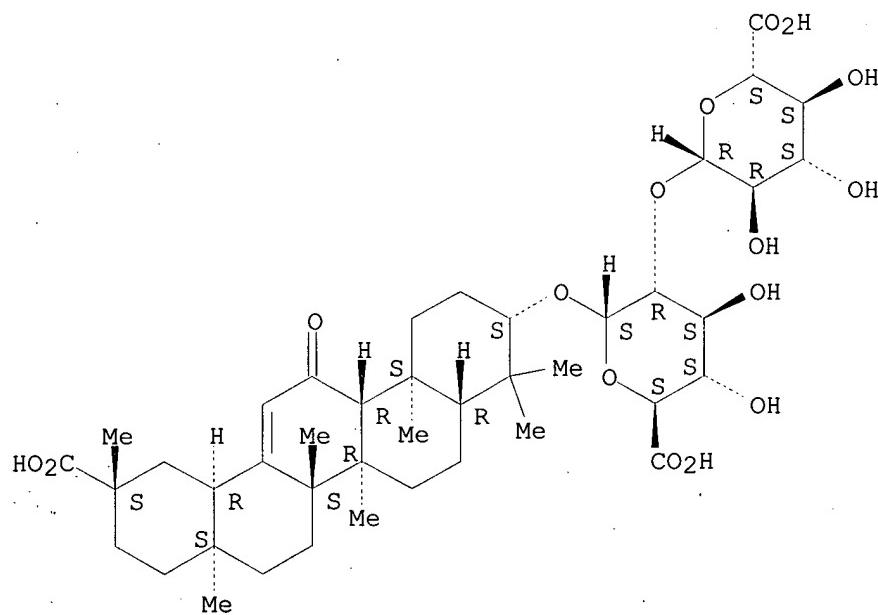
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 56649-78-6 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

●x Na

L105 ANSWER 68 OF 114 HCAPLUS COPYRIGHT 2003 ACS
 AN 1995:294571 HCAPLUS
 DN 122:64040
 TI Breath protection microcapsules containing antimicrobial agents and sweeteners
 IN Peterson, Liezl G.; Sanker, Lowell A.; Upson, James G.
 PA Procter and Gamble Co., USA
 SO U.S., 4 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K009-50
 ICS A61K009-16; A61K009-68
 NCL 424049000
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5370864	A	19941206	US 1993-85222	19930629 <--
	WO 9501156	A1	19950112	WO 1994-US5955	19940526 <--
	W: BR, CA, CN, JP, PL, RU RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5620707	A	19970415	US 1996-609411	19960301 <--
PRAI	US 1993-85222		19930629 <--		
	US 1994-312843		19940927 <--		

AB The present invention relates to **oral compns.** in the form of microcapsules which reduce oral bacteria and provide long-lasting **breath** protection. The **breath** control/antimicrobial active agent is selected from **cetyl pyridinium chloride**, domiphen bromide, and mixts. thereof. A preferred sweetener is a mixt. of acetosulfam, saccharin Na, aspartyl phenylalanine Me ester, and monoammonium **glycyrrhizin**. For example, a **breath**-freshening microcapsule contained gelatin 9.840, 70% sorbitol soln. 3.616, saccharin 0.418, acetosulfam 0.495, aspartyl phenylalanine Me ester 0.495, and monoammonium **glycyrrhizin** 0.027, neohesperidin dihydrochalcone 0.020, FD&C blue no.1 0.010, FD&C yellow no.5 0.005, Captex-300 8.352, flavor 7.158, **cetyl pyridinium chloride** 0.675, domiphen bromide 0.075, propylene glycol 2.017, glycerin 0.270, PEG 29.522, sucrose acetate isobutyrate 33.408, and water 3.397%.

ST **breath** freshener microcapsule quaternary ammonium compd

IT Sweetening agents

(breath protection microcapsules contg. antimicrobial agents and sweeteners)

IT Quaternary ammonium compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(breath protection microcapsules contg. antimicrobial agents and sweeteners)

IT Deodorants

(breath fresheners, breath protection microcapsules contg. antimicrobial agents and sweeteners)

IT Pharmaceutical dosage forms

(microcapsules, oral; **breath** protection microcapsules contg. antimicrobial agents and sweeteners)

IT Bacteria
(oral, **breath** protection microcapsules contg. antimicrobial agents and sweeteners)

IT 81-07-2, Saccharin **123-03-5, Cetyl pyridinium chloride** 128-44-9, Saccharin sodium 139-05-9, Cyclohexylsulfamic acid sodium salt 538-71-6, Domiphen bromide 20702-77-6, Neohesperidin dihydrochalcone 22839-47-0, Aspartyl phenylalanine methyl ester **53956-04-0, Glycyrrhizin** monoammonium salt 55589-62-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

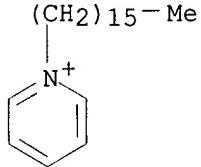
(**breath** protection microcapsules contg. antimicrobial agents and sweeteners)

IT **123-03-5, Cetyl pyridinium chloride**
53956-04-0, Glycyrrhizin monoammonium salt
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**breath** protection microcapsules contg. antimicrobial agents and sweeteners)

RN 123-03-5 HCPLUS

CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



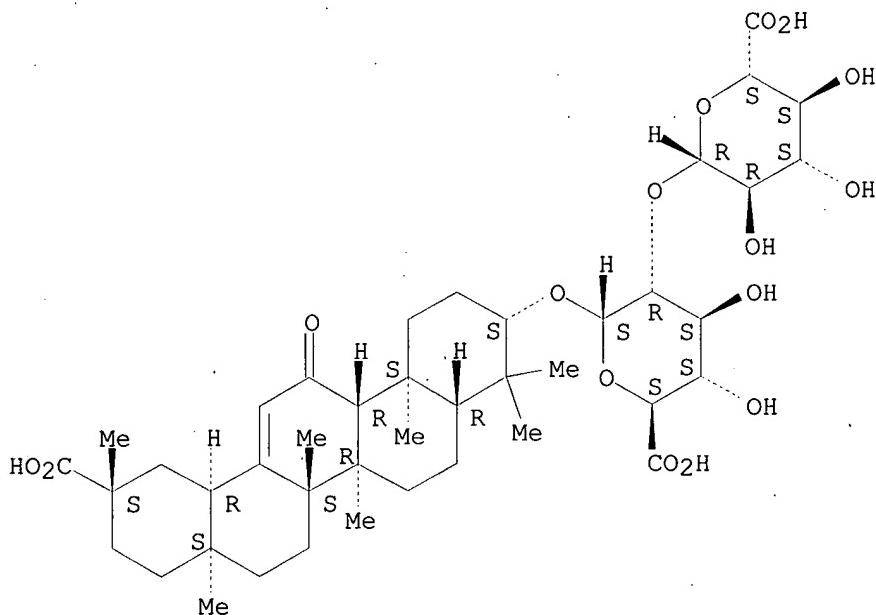
● Cl⁻

RN 53956-04-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● NH₃

L105 ANSWER 69 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1994:517414 HCAPLUS

DN 121:117414

TI Oral compositions containing halogenated diphenyl ethers and their containers

IN Yamamoto, Mizuya; Sugawara, Koichi; Shirai, Katsue; Kato, Hiroyasu

PA Lion Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICS A61K007-20

CC 62-7 (Essential Oils and Cosmetics)
Section cross-reference(s): 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
PI JP 06092830	A2	19940405	JP 1992-268115	19920910 <--
JP 3315733	B2	20020819		

PRAI JP 1992-268115 19920910 <--

AB **Oral compns.** contain halogenated di-Ph ethers as active ingredients, which are filled into containers at least partially made of ethylene-vinyl alc. copolymer or acrylonitrile copolymers obtained by polymg. CH₂:CRCN (I; R = H, lower alkyl, halo) and CH₂:CRCO₂R' (R = same as above; R' = alkyl) with copolymers of butadiene and/or isoprene and I. The **oral compns.** show storage stability and are effective in controlling e.g. **periodontal** disease and dental

caries. Thus, a **dentifrice** was prep'd. from CaHPO₄ 47.0, silicic anhydride 2.5, sorbitol 24.0, propylene glycol 3.0, Na CM-cellulose 1.0, carrageenan 0.2, Na lauryl sulfate 1.5, Na lauroyl sarcosinate 0.3, saccharin Na 0.1, perfumes 1.0, Me p-hydroxybenzoate 0.1, Na benzoate 0.3, triclosan 0.3, Na₂SO₄ 0.05, tranexamic acid 0.05, dipotassium **glycyrrhizinate** 0.05, and H₂O to 100.0% by wt. and filled into a tube with inner surface coating with an acrylonitrile (II) copolymer (prep'd. by graft copolyrn. of II-butadiene rubber, II, and Me acrylate; II content 75%).

ST halogenated diphenyl ether **oral compn**; acrylonitrile copolymer container **oral compn**; ethylene vinyl alc copolymer container

IT Containers

(acrylonitrile copolymer or ethylene-vinyl alc. copolymer, for **oral compns.** contg. halogenated di-Ph ethers)

IT Dentifrices

Mouthwashes

(contg. halogenated di-Ph ethers, acrylonitrile copolymer or ethylene-vinyl alc. copolymer containers for)

IT Tooth

(disease, **caries**, prevention of, **oral compns.** contg. halogenated di-Ph ethers for)

IT Periodontium

(disease, **periodontitis**, prevention of, **oral compns.** contg. halogenated di-Ph ethers for)

IT 25067-34-9, Ethylene-vinyl alcohol copolymer 108771-80-8, Acrylonitrile-butadiene-methyl acrylate graft copolymer

RL: BIOL (Biological study)

(containers, for **oral compns.** contg. halogenated di-Ph ethers)

IT 3380-34-5, Triclosan

RL: BIOL (Biological study)

(**oral compns.** contg., acrylonitrile copolymer or ethylene-vinyl alc. copolymer containers for)

L105 ANSWER 70 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1994:442453 HCPLUS

DN 121:42453

TI liquid **toothpaste** for control of dental **caries** and **periodontal** disease

IN Wu, Haiyuan

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM A61K007-26

ICS A61K035-78

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 1

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1078882	A	19931201	CN 1992-106198	19920520 <--
PRAI CN 1992-106198		19920520		<--

AB A liq. **toothpaste** for control of dental **caries** and **periodontal** diseases contain chlorhexidine acetate, NaCl, Na monofluorophosphate, foaming agents and flavors with addn. of Eugenia caryophyllata 10-12, Mentha haplocalyx 8-10, liquorice 5-10, Sophora subprostrata 8-14, Calvatia gigantea 8-16, Taraxacum mongolicum 6-12, Isatis tinctoria 6-12, Forsythia suspensa 6-14, and Lonicera japonica 6-10g.

ST liq **toothpaste** dental **caries** **periodontal**

IT disease
 IT Calvatia gigantea
 Clove
 Forsythia suspensa
 Isatis tinctoria
 Mentha haplocalyx
 Sophora subprostrata
 Taraxacum mongolicum
Licorice
 RL: BIOL (Biological study)
 (liq. toothpaste contg., for control of dental caries
 and periodontal disease)
 IT Dentifrices
 (liq., medicinal plants and chlorhexidine acetate and other substances
 in, for control of dental caries and periodontal
 disease)
 IT Honeysuckle
 (L. japonica, liq. toothpaste contg., for control of dental
 caries and periodontal disease)
 IT Periodontium
 (disease, control of, liq. toothpaste contg. medicinal plants
 and chlorhexidine acetate and other substances for)
 IT Tooth
 (disease, caries, control of, liq. toothpaste
 contg. medicinal plants and chlorhexidine acetate and other substances
 for)
 IT 56-95-1, Chlorhexidine acetate 7631-97-2, Sodium monofluorophosphate
 7647-14-5, Sodium chloride, biological studies
 RL: BIOL (Biological study)
 (liq. toothpaste contg., for control of dental caries
 and periodontal disease)

L105 ANSWER 71 OF 114 HCAPLUS COPYRIGHT 2003 ACS
 AN 1994:417762 HCAPLUS
 DN 121:17762
 TI toothpaste for periodontal disease control
 IN He, Mingfu
 PA Peop. Rep. China
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
 CODEN: CNXXEV
 DT Patent
 LA Chinese
 IC ICM A61K007-16
 ICS A61K007-26
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 1, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
PI CN 1077114	A	19931013	CN 1992-114421	19921209 <--
PI CN 1033421	B	19961204		

PRAI CN 1992-114421 19921209 <--
 AB A toothpaste for periodontal disease control contains
 bromogeramine 1-1.5, citric acid 0.5-1, powd. gypsum 63-76, Na lauryl
 sulfate 6-8, Wubeizi ext. 0.1, liquorice root ext. 1.5, glycerol
 10-15, water 5-10, and saccharin 2-3%. The toothpaste was
 effective and also controlled periodontal disease.

ST toothpaste periodontal disease
 IT Dentifrices
 (bromogeramine and other substances in, for periodontal
 disease control)
 IT Licorice
 RL: BIOL (Biological study)

(exts., toothpaste contg., for **periodontal** disease control)

IT Pharmaceutical natural products
 RL: BIOL (Biological study)
 (Wubeizi, exts., toothpaste contg., for **periodontal** disease control)

IT Quaternary ammonium compounds, biological studies
 RL: BIOL (Biological study)
 (alkylbenzyldimethyl, bromides, toothpaste contg., for **periodontal** disease control)

IT **Periodontium**
 (disease, control of, toothpaste for)

IT 77-92-9, Citric acid, biological studies 151-21-3, Sodium lauryl sulfate, biological studies 13397-24-5, Gypsum, biological studies
 RL: BIOL (Biological study)
 (toothpaste contg., for **periodontal** disease control)

L105 ANSWER 72 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1994:14682 HCAPLUS

DN 120:14682

TI Cosmetic and pharmaceutical compositions containing **glycyrrhetic acid** and phenanthridine alkaloids and a salt

IN Olivieri, Aldo

PA Kemiprogress S.r.l., Italy

SO Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K031-485

ICI A61K031-485, A61K031-19

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 565495	A1	19931013	EP 1993-830139	19930402 <--
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, PT				
	CA 2093401	AA	19931011	CA 1993-2093401	19930405 <--
	US 5425948	A	19950620	US 1993-43493	19930406 <--

PRAI IT 1992-RM270 19920410 <--

AB The title compns. are useful for the treatment and prevention of cutaneous and oral mucous membrane inflammations. A toothpaste contained **glycyrrhetic acid** 0.3, sanguinaria canadensis ext. 1, ZnCl₂ 0.07, and NaFHPo₄ 0.8%.

ST glycyrrhetinate phenanthridine alkaloid salt pharmaceutical; toothpaste glycyrrhetinate sanguinaria ext zinc chloride

IT Sanguinaria canadensis

(ext., pharmaceutical compns. contg. **glycyrrhetic acid** and salts and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT Alkaloids, biological studies

RL: BIOL (Biological study)

(of sanguinaria, pharmaceutical compns. contg. **glycyrrhetic acid** and salts and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT Salts, biological studies

RL: BIOL (Biological study)

(pharmaceutical compns. contg. phenanthridine alkaloids and **glycyrrhetic acid** and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT Inflammation inhibitors

(pharmaceutical compns. contg., for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Dentifrices**

Shampoos

Soaps

RL: BIOL (Biological study)

(phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Dermatitis**

(prevention and treatment of, with cosmetic and pharmaceutical compns. contg. **glycyrrhetic acid** and phenanthridine alkaloids and salts)

IT **Acne**

Hematoma

Wound

(prevention and treatment of, with pharmaceutical compns. contg. phenanthridine alkaloids and **glycyrrhetic acid** and salts)

IT **Dental materials and appliances**

(cements, phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Tooth**

(disease, **caries**, prevention and treatment of, with pharmaceutical compns. contg. phenanthridine alkaloids and **glycyrrhetic acid** and salts)

IT **Mucous membrane**

(disease, inflammation, oral, prevention and treatment of, with cosmetic and pharmaceutical compns. contg. **glycyrrhetic acid** and phenanthridine alkaloids and salts)

IT **Periodontium**

(disease, **periodontitis**, prevention and treatment of, with pharmaceutical compns. contg. phenanthridine alkaloids and **glycyrrhetic acid** and salts)

IT **Pharmaceutical dosage forms**

(lotions, phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Pharmaceutical dosage forms**

(ointments, phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Pharmaceutical dosage forms**

(ointments, creams, phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Medical goods**

(plasters, phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **Pharmaceutical dosage forms**

(powders, phenanthridine alkaloids and **glycyrrhetic acid** and salts in, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT **546-46-3, Zinc citrate 7646-85-7, Zinc**

chloride, biological studies 7681-49-4, Sodium fluoride, biological studies 7783-47-3, Stannous fluoride 10163-15-2, Sodium monofluorophosphate

RL: BIOL (Biological study)

(cosmetic and pharmaceutical compns. contg. phenanthridine alkaloids and **glycyrrhetic acid** and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT 471-53-4, Glycyrrhetic acid

RL: BIOL (Biological study)

(cosmetic and pharmaceutical compns. contg. phenanthridine alkaloids and salts and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT 151688-07-2, Fitosoma

RL: BIOL (Biological study)

(pharmaceutical compns. contg. phenanthridine alkaloids and salts and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

IT 546-46-3, Zinc citrate 7646-85-7, Zinc

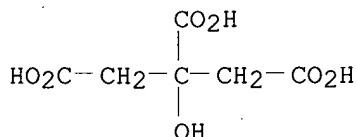
chloride, biological studies

RL: BIOL (Biological study)

(cosmetic and pharmaceutical compns. contg. phenanthridine alkaloids and glycyrrhetic acid and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

RN 546-46-3 HCPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)



● 3/2 Zn

RN 7646-85-7 HCPLUS

CN Zinc chloride (ZnCl₂) (9CI) (CA INDEX NAME)

Cl-Zn-Cl

IT 471-53-4, Glycyrrhetic acid

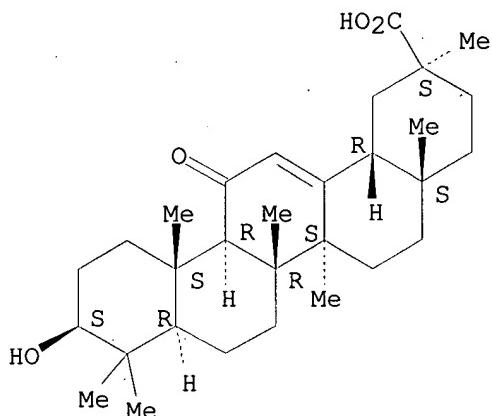
RL: BIOL (Biological study)

(cosmetic and pharmaceutical compns. contg. phenanthridine alkaloids and salts and, for prevention and treatment of cutaneous and oral mucous membrane inflammations)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.β.,20.β.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 73 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1993:474991 HCAPLUS

DN 119:74991

TI Oligoglycosides and their preparation

IN Okada, Shigetaka; Kanbara, Isao; Yonetani, Takashi; Tanimoto, Shusuke; Nishimura, Takahisa

PA Ezaki Glico Co, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08B037-00

ICS C12P019-18

CC 44-6 (Industrial Carbohydrates)

Section cross-reference(s): 17, 33

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05070502	A2	19930323	JP 1991-262847	19910913
	JP 3104084	B2	20001030		

PRAI JP 1991-262847 19910913

AB The title glycosides, i.e. [G]_n[G'X] having an .alpha.-1,4-glucan moiety [G]_n with d.p. .gtoreq.8, which bears, on the glucosyl C-1 positions, substituents [G'X] derived from C-4-based X-substituted glucose, glucuronic or gulonic acid groups (where X are mono- or oligosaccharides, sugar alcs. or aglycons) are prep'd. by the enzyme-catalyzed coupling of a donor and an acceptor and become water-insol. for good handling. In this manner, a cyclodextrin as donor, was coupled with stevioside as acceptor catalyzed by 1,4-.alpha.-D-glucan;4-.alpha.-D-(1,4-glucano)-transferase to give a pptd. product which was proven to give glucose and stevioside via assayed with 1,4-.alpha.-D-glucan glucohydrolase.

ST cyclodextrin glycoside prepn enzymic reaction; glucan ether prepn enzymic coupling

IT Coupling reaction
(enzymic, of glucan donors with acceptors)

IT Polysaccharides, compounds

RL: PREP (Preparation)
(ethers, prepn. of, enzymes involved in)

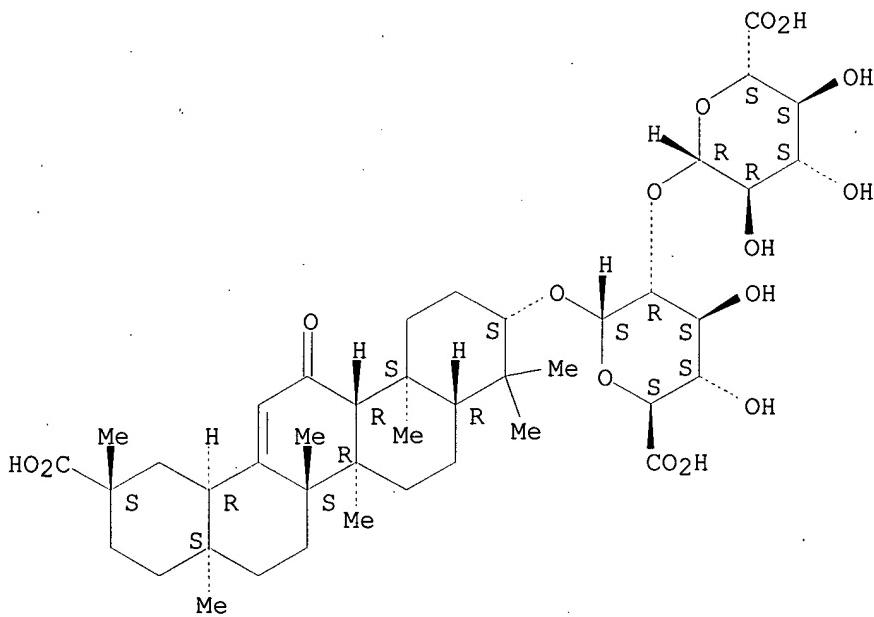
IT Glycosides

RL: PREP (Preparation)
(oligo-, prepn. of, enzymes involved in)

IT 138-52-3, Salicin 1405-86-3, Glycyrrhizin
57817-89-7, Stevioside 58543-16-1, Rebaudioside A

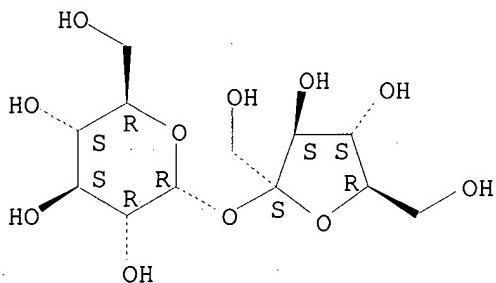
- RL: USES (Uses)
 (acceptor, coupling of, with donor)
- IT 57-50-1, Sucrose, miscellaneous
- RL: MSC (Miscellaneous)
 (acceptor, coupling of, with donor)
- IT 1109-28-0, Maltotriose 10016-20-3, .alpha.-Cyclodextrin
- RL: USES (Uses)
 (donor, coupling of, with acceptors)
- IT 9005-25-8, Starch, reactions
- RL: RCT (Reactant); RACT (Reactant or reagent)
 (donor, coupling of, with acceptors)
- IT 57-50-1DP, carbohydrate ethers 138-52-3DP, cyclodextrin ethers
 1109-28-0DP, carbohydrate ethers 1405-86-3DP,
 carbohydrate ethers 9005-25-8DP, Starch, sucrose ethers
 10016-20-3DP, .alpha.-Cyclodextrin, carbohydrate ethers
 57817-89-7DP, carbohydrate ethers 58543-16-1DP, carbohydrate ethers
- RL: PREP (Preparation)
 (prepn. of, enzymes involved in)
- IT 9032-09-1
- RL: USES (Uses)
 (reaction of glucan donors with acceptors catalyzed by)
- IT 1405-86-3, Glycyrrhizin
- RL: USES (Uses)
 (acceptor, coupling of, with donor)
- RN 1405-86-3 HCPLUS
- CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



- IT 57-50-1, Sucrose, miscellaneous
- RL: MSC (Miscellaneous)
 (acceptor, coupling of, with donor)
- RN 57-50-1 HCPLUS
- CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 1109-28-0, Maltotriose 10016-20-3, .alpha.-Cyclodextrin

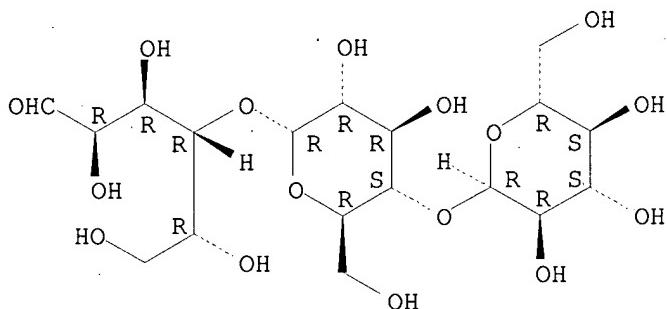
RL: USES (Uses)

(donor, coupling of, with acceptors)

RN 1109-28-0 HCPLUS

CN D-Glucose, O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)- (9CI) (CA INDEX NAME)

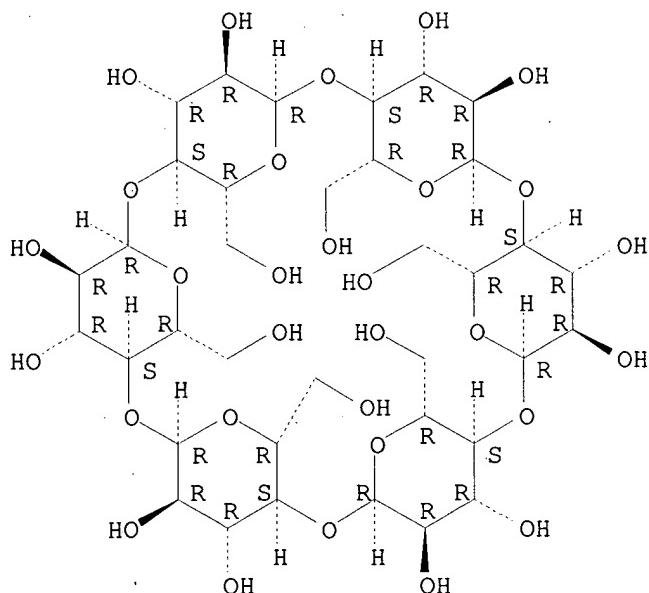
Absolute stereochemistry.



RN 10016-20-3 HCPLUS

CN .alpha.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 9005-25-8, Starch, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(donor, coupling of, with acceptors)

RN 9005-25-8 HCPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 57-50-1DP, carbohydrate ethers 1109-28-0DP, carbohydrate
ethers 1405-86-3DP, carbohydrate ethers 9005-25-8DP,
Starch, sucrose ethers 10016-20-3DP, .alpha.-Cyclodextrin,
carbohydrate ethers

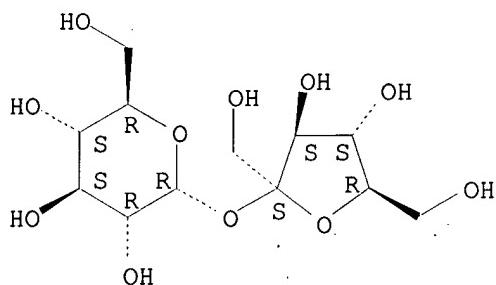
RL: PREP (Preparation)

(prepn. of, enzymes involved in)

RN 57-50-1 HCPLUS

CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

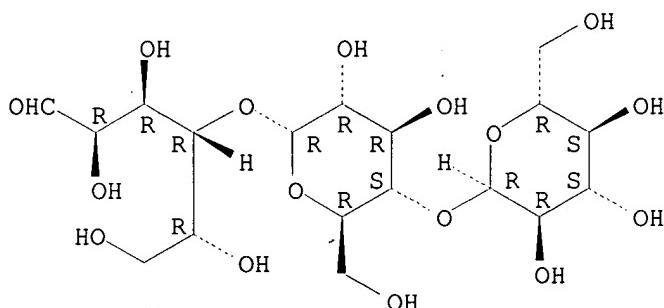
Absolute stereochemistry.



RN 1109-28-0 HCPLUS

CN D-Glucose, O-.alpha.-D-glucopyranosyl-(1.fwdarw.4)-O-.alpha.-D-
glucopyranosyl-(1.fwdarw.4)- (9CI) (CA INDEX NAME)

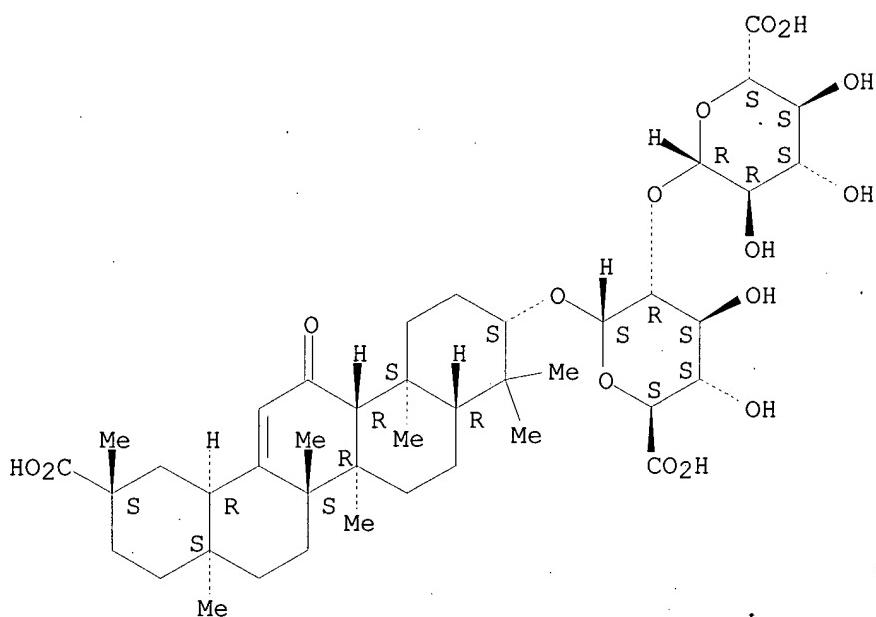
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

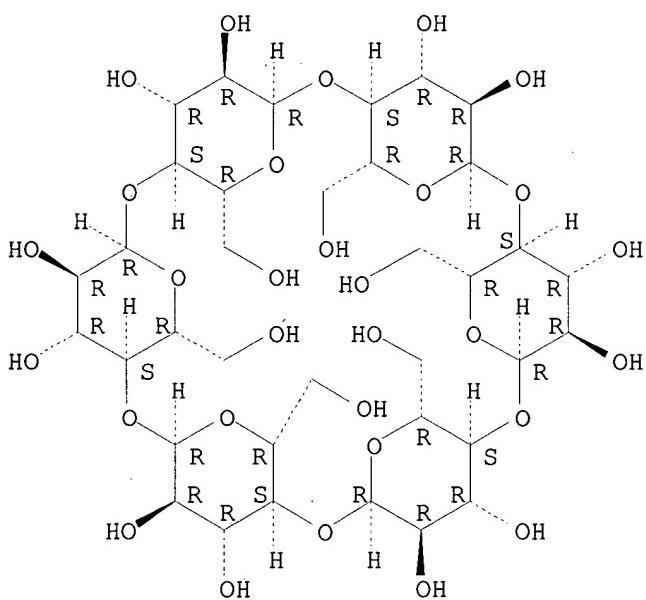


RN 9005-25-8 HCPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 10016-20-3 HCPLUS
 CN .alpha.-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 74 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1993:197810 HCPLUS
 DN 118:197810
 TI Cosmetic gel comprising a glycyrrhizic acid compound
 and a polymer

IN Kawado, Junji; Ishiguro, Tokuichi
 PA Max Factor K.K., Japan
 SO Brit. UK Pat. Appl., 22 pp.
 CODEN: BAXXDU
 DT Patent
 LA English
 IC ICM A61K007-00
 CC 62-4 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2257907	A1	19930127	GB 1992-14584	19920709
	GB 2257907	B2	19950426		
	JP 05032521	A2	19930209	JP 1991-186590	19910725
	AU 9220530	A1	19930128	AU 1992-20530	19920723
	AU 666119	B2	19960201		
	CN 1068731	A	19930210	CN 1992-108859	19920725
PRAI	JP 1991-186590		19910725		

AB A cosmetic gel is disclosed which comprises a **glycyrrhizic acid** compd. and a gelation-accelerating high polymeric compd; the gel may further contain a surface-active agent and an **oil-sol.** component. Formulations are included for e.g. an emollient lotion gel and a sunscreen lotion gel. A compn. was prep'd. which included monoammonium glycyrrhizate, carboxyvinyl polymer, polyoxyethylene glyceryl pyroglutamate, octyl p-dimethylaminobenzoate, vitamin E, alc., water, NaOH, and perfume. The compn., which had an **oil-sol.** component level of 0.7%, gelled without aging, was an easily disintegrable gel, and had excellent long-term gel stability. The compn. also showed very satisfactory results in an organoleptic test for feel on use.

ST cosmetic gel glycyrrhizate gelation polymer; carboxyvinyl polymer glycyrrhizate cosmetic gel

IT Surfactants

(cosmetic gel with glycyrrhizate and gelation-accelerating polymer and, gel stability in relation to)

IT Gums and Mucilages

(cosmetic gel with glycyrrhizate and gelation-accelerating, gel stability in relation to)

IT Polymers, biological studies

RL: BIOL (Biological study)

(gelation-accelerating, cosmetic gel contg. glycyrrhizate and, gel stability in relation to)

IT Sunscreens

(gels, with glycyrrhizate and gelation-accelerating polymer, gel stability in relation to)

IT Vinyl compounds, polymers

RL: BIOL (Biological study)

(carboxy-contg., polymers, cosmetic gel contg. monoammonium glycyrrhizate and, gel stability in relation to)

IT Cosmetics

(emollients, gels, with glycyrrhizate and gelation-accelerating polymer, gel stability in relation to)

IT Cosmetics

(gels, with glycyrrhizate and gelation-accelerating polymer, gel stability in relation to)

IT Cosmetics

(lotions, gels, with glycyrrhizate and gelation-accelerating polymer, gel stability in relation to)

IT 1405-86-3, Glycyrrhizic acid

1405-86-3D, Glycyrrhizic acid, salts

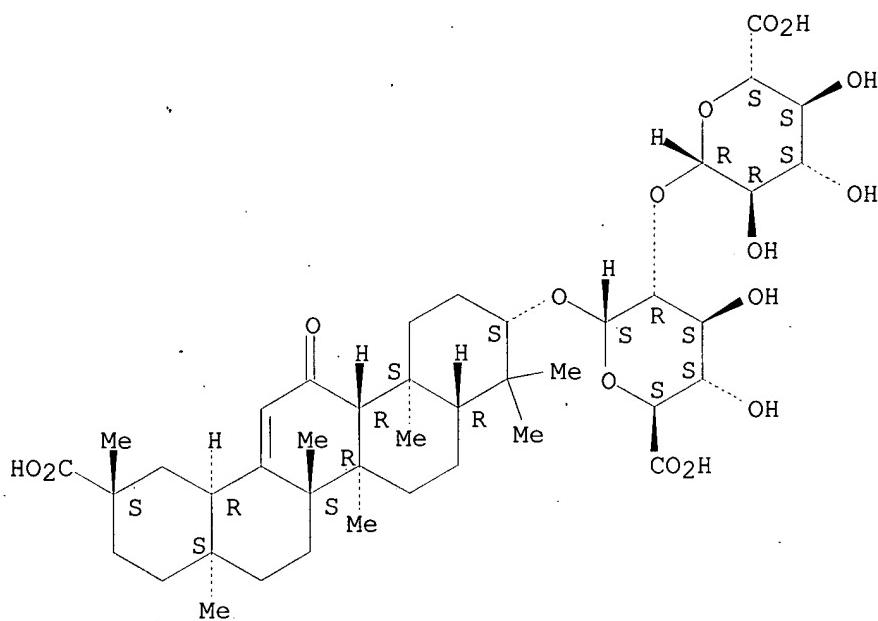
53956-04-0, Monoammonium glycyrrhizate

RL: BIOL (Biological study)

(cosmetic gel contg. gelation-accelerating polymer and, gel stability in relation to)

- IT 11052-19-0
RL: BIOL (Biological study)
(cosmetic gel contg. hydroxyethyl cellulose and, gel stability in relation to)
- IT 1406-18-4, Vitamin E 9004-32-4, Sodium carboxymethyl cellulose
58817-05-3, Octyl p-dimethylaminobenzoate 147130-22-1
RL: BIOL (Biological study)
(cosmetic gel contg. monoammonium glycyrrhizate and carboxyvinyl polymer and, gel stability in relation to)
- IT 111-02-4, Squalene 9005-64-5
RL: BIOL (Biological study)
(cosmetic gel contg. monoammonium glycyrrhizate and sodium CM-cellulose and, gel stability in relation to)
- IT 11138-66-2, Xanthan gum
RL: BIOL (Biological study)
(cosmetic gel contg. monoammonium glycyrrhizate and, gel stability in relation to)
- IT 9004-98-2
RL: BIOL (Biological study)
(cosmetic gel contg. monosodium glycyrrhizate and hydroxyethyl cellulose and, gel stability in relation to)
- IT 58-95-7 147130-48-1
RL: BIOL (Biological study)
(cosmetic gel contg. monosodium glycyrrhizate and xanthan gum and, gel stability in relation to)
- IT 9004-62-0, Hydroxyethyl cellulose
RL: BIOL (Biological study)
(cosmetic gel contg. monosodium glycyrrhizate and, gel stability in relation to)
- IT 1405-86-3, Glycyrrhizic acid
1405-86-3D, Glycyrrhizic acid, salts
53956-04-0, Monoammonium glycyrrhizate
RL: BIOL (Biological study)
(cosmetic gel contg. gelation-accelerating polymer and, gel stability in relation to)
- RN 1405-86-3 HCPLUS
CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-. β .-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

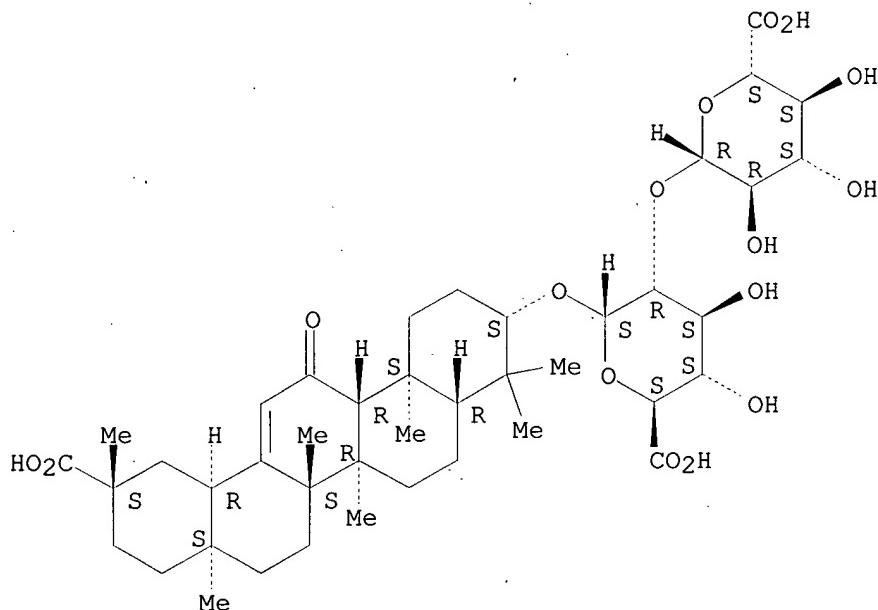
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

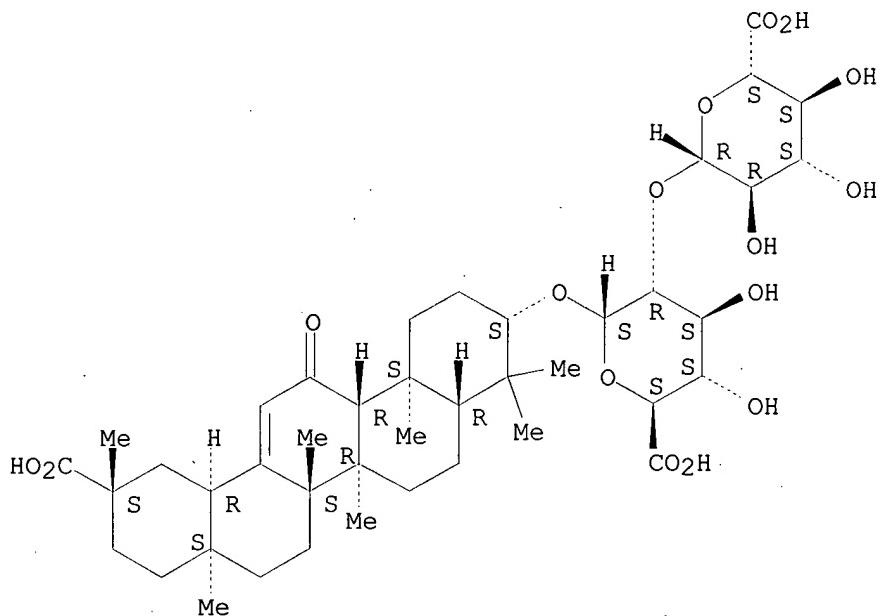


RN 53956-04-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● NH₃

IT 11052-19-0

RL: BIOL (Biological study)

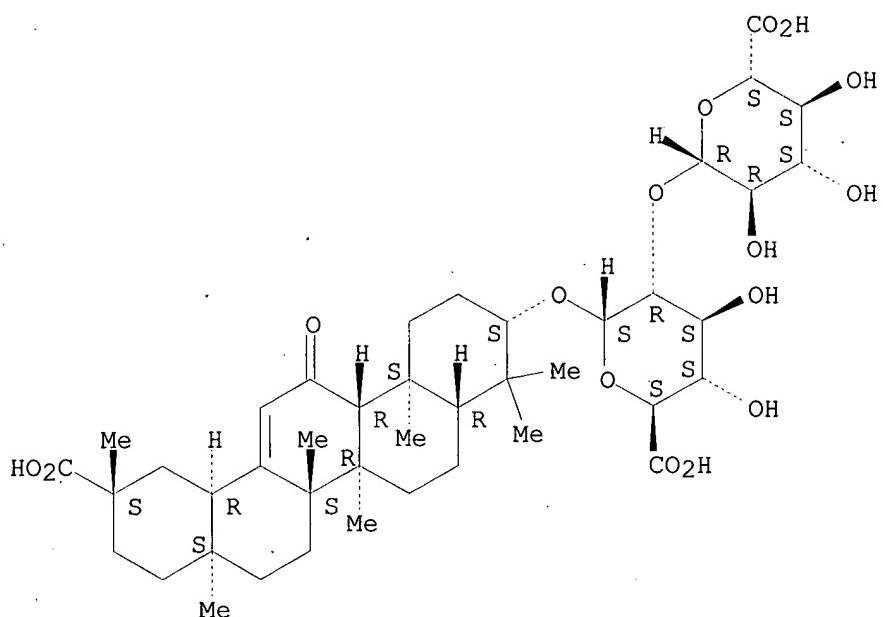
(cosmetic gel contg. hydroxyethyl cellulose and, gel stability in relation to)

RN 11052-19-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● Na

IT 9004-32-4, Sodium carboxymethyl cellulose

RL: BIOL (Biological study)

(cosmetic gel contg. monoammonium glycyrrhizate and carboxyvinyl polymer and, gel stability in relation to)

RN 9004-32-4 HCAPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

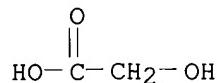
CC1 PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1

CMF C2 H4 O3



IT 11138-66-2, Xanthan gum

RL: BIOL (Biological study)

(cosmetic gel contg. monoammonium glycyrrhizate and, gel stability in

relation to)
RN 11138-66-2 HCAPLUS
CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 9004-62-0, Hydroxyethyl cellulose
RL: BIOL (Biological study)
(cosmetic gel contg. monosodium glycyrrhizate and, gel stability in
relation to)
RN 9004-62-0 HCAPLUS
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2

HO—CH₂—CH₂—OH

L105 ANSWER 75 OF 114 HCAPLUS COPYRIGHT 2003 ACS
AN 1993:27477 HCAPLUS
DN 118:27477
TI Antipyretic, analgesic and anti-inflammatory preparations
IN Takahashi, Kazuhiko; Uji, Kingo; Takano, Akiko; Matsumoto, Koichi;
Takahashi, Koichi
PA Nippon Surfactant Kogyo K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K045-08
ICS A61K009-02; A61K009-08; A61K009-70; A61K031-135; A61K031-19;
A61K031-195; A61K031-245; A61K031-405; A61K031-415; A61K031-44;
A61K031-445; A61K031-455; A61K031-48; A61K031-495; A61K031-54;
A61K031-60; A61K047-10; A61K047-12; A61K047-14
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04217925	A2	19920807	JP 1991-85934	19910327
PRAI JP 1990-75575		19900327		

AB The title compn. comprises a pharmaceutical, polar oils, a water-sol. polyhydric alc., and water. The active agent is well dissolved in the system and the compn. remains stable during storage. Thus, a gel contg. diclofenac Na 2, gelatin 1.5, polyvinylpyrrolidone 4, monocapryl glyceride 8, methylparaben 0.1, propylparaben 0.05, kaolin 10, 70% sorbitol soln. 43, CM-cellulose 5, and water 27.35 parts was formulated and stored in the refrigerator for 4 wk with no ppt. formation.
ST antipyretic polar lipid polyhydric alc; antiinflammatory gel lipid polyhydric alc; analgesic oil alc formulation
IT Fatty acids, biological studies
Oligosaccharides

IT RL: PREP (Preparation)
 (antipyretic and anti-inflammatory topical preps. contg.)

IT Fatty acids, esters
 IT RL: PREP (Preparation)
 (esters, with polyhydric alcs., antipyretic and anti-inflammatory topical preps. contg.)

IT Alcohols, biological studies
 IT RL: PREP (Preparation)
 (fatty, antipyretic and anti-inflammatory topical preps. contg.)

IT Pharmaceutical dosage forms
 (oral, of antipyretics and anti-inflammatories, polar lipids and polyhydric alcs. in)

IT Lipids, biological studies
 IT RL: PREP (Preparation)
 (polar, antipyretic and anti-inflammatory topical preps. contg.)

IT Alcohols, biological studies
 IT RL: PREP (Preparation)
 (polyhydric, antipyretic and anti-inflammatory topical preps. contg.)

IT Oligosaccharides
 IT RL: PREP (Preparation)
 (reduced, antipyretic and anti-inflammatory topical preps. contg.)

IT Pharmaceutical dosage forms
 (solns., ophthalmic, of antipyretics and anti-inflammatories, polar lipids and polyhydric alcs. in)

IT Pharmaceutical dosage forms
 (suppositories, of antipyretics and anti-inflammatories, polar lipids and polyhydric alcs. in)

IT Pharmaceutical dosage forms
 (tapes, of antipyretics and anti-inflammatories, polar lipids and polyhydric alcs. in)

IT Pharmaceutical dosage forms
 (topical, of antipyretics and anti-inflammatories, polar lipids and polyhydric alcs. in)

IT 50-78-2, Aspirin 53-86-1, Indomethacin 54-21-7, Sodium salicylate
 61-68-7, Mefenamic acid 68-89-3, Sulpyrine 92-24-0, Naphthacene
 127-48-0, Trimethin 132-69-4, Benzylamine hydrochloride 379-79-3,
 Ergotamine tartrate **471-53-4**, **Glycyrrhetic acid** 530-78-9, Flufenamic acid 552-94-3, Salicyl salicylate
 2016-36-6 2139-25-5, Perisoxal citrate 4394-00-7, Niflumic acid
 5104-49-4, Flurbiprofen 13115-40-7, Dimethothiazine mesylate
 13993-65-2, Methiazinic acid 15307-79-6, Diclofenac sodium 15687-27-1
 17737-65-4, Clonixin 18046-21-4, Fentiazac 20187-55-7, Bendazac
 22071-15-4 22131-79-9, Alclofenac 25913-34-2 34148-01-1, Clidanac
 34597-40-5, Fenoprofen calcium 35941-71-0, Tiaramide hydrochloride
 36282-47-0, Tramadol hydrochloride 36322-90-4, Piroxicam 36330-85-5,
 Fenbufen 38194-50-2, Sulindac 52549-17-4, Pranoprofen 54323-85-2,
 Prothizinic acid 62952-06-1
 IT RL: BIOL (Biological study)
 (Antipyretic and anti-inflammatory preps. contg., polar lipids and polyhydric alcs. in)

IT 50-21-5D, fatty acid esters 50-70-4, D-Glucitol, biological studies
 56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6,
 1,2-Propanediol, biological studies 107-21-1, 1,2-Ethanediol, biological studies 107-88-0, 1,3-Butylene glycol 111-20-6D, Decanedioic acid, fatty acid esters 111-46-6, Diethylene glycol, biological studies 124-04-9D, Hexanedioic acid, fatty acid esters 652-67-5, Isosorbide 3149-68-6, Methyl glucoside 12441-09-7, Sorbitan 25265-71-8, Dipropylene glycol 25322-68-3 25322-69-4, Polypropylene glycol 25618-55-7, Polyglycerin 59113-36-9, Diglycerin
 IT RL: BIOL (Biological study)
 (antipyretic and anti-inflammatory topical preps. contg.)

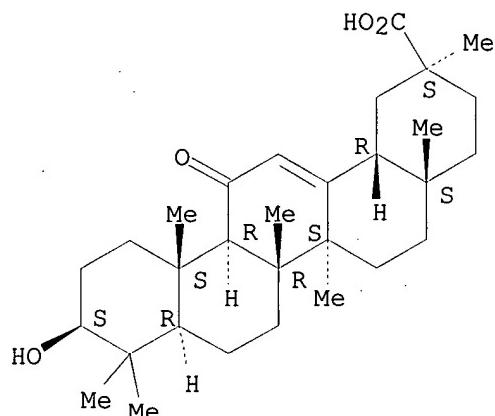
IT **471-53-4, Glycyrrhetic acid**
 IT RL: BIOL (Biological study)

(Antipyretic and anti-inflammatory preps. contg., polar lipids and polyhydric alcs. in)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.beta.,20.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 76 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1992:557447 HCPLUS

DN 117:157447

TI Dentifrices containing substances extracted from licorice and analogous plants

IN Suido, Hirohisa; Makino, Tomoo; Yamane, Yukie; Naeshiro, Hidekazu

PA Sunstar, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 11

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04164021	A2	19920609	JP 1990-289447	19901026 <--
	JP 2848688	B2	19990120		
PRAI	JP 1990-289447		19901026		

AB A dentifrice contains l-menthol or l-carvone with a fat-sol. ext. of licorice contg. glabridin, glabrene, licochalcone A, licochalcone B, and licocoumarone. A toothpaste was prep'd. contg. 0.1 % licorice ext. (glabridin 10 and glabrene 3%) and 0.5 % l-carvone.

ST dentifrice licorice ext

IT Licorice

RL: BIOL (Biological study)
(ext. of, dentifrices contg.)

IT Dentifrices

(licorice ext. in)

IT Chewing gum

(licorice ext.-contg.)

IT Confectionery

(candy, licorice ext.-contg.)

IT 2216-51-5, 1-Menthol 6485-40-1, 1-Carvone

RL: BIOL (Biological study)

(dentifrice contg. licorice ext. and)

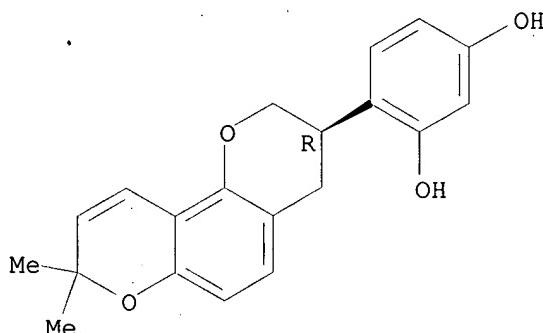
IT 58749-22-7, Licochalcone A 58749-23-8, Licochalcone B **59870-68-7**
, Glabridin 60008-03-9, Glabrene 118524-14-4, Licocoumarone
RL: BIOL (Biological study)
(of licorice, dentifrice contg.)

IT **59870-68-7, Glabridin**
RL: BIOL (Biological study)
(of licorice, dentifrice contg.)

RN 59870-68-7 HCAPLUS

CN 1,3-Benzene diol, 4-[(3R)-3,4-dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 77 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1992:136046 HCAPLUS

DN 116:136046

TI **Dentifrices** containing Pharmaceutical granules

IN Maeda, Akitsugu

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI JP 03271215	A2	19911203	JP 1990-71154	19900320 <--
JP 2857789	B2	19990217		
PRAI JP 1990-71154		19900320 <--		

AB Granules with particle size 50-500 .mu.m, which contain water-insol. inorg. binders and pharmaceuticals for oral diseases, are prep'd. which disintegrate by the load of 0.1-10 g per particle. The granules enter interdental space and periodontal pocket and pharmaceutically effective components act there to prevent dental caries and periodontal diseases. An aq. slurry (H₂O content 60%) contg. synthetic Al silicate 89, colloidal silica 10, and .beta.-glycyrrhetic acid (I) 1 parts was spray-granulated to give granules (dism. 50-500 .mu.m) and disintegration strength 4.15 g/particle. A dentifrice contained the granules 15.0, glycerin 10.0, sorbitol soln. 30.0, CM-cellulose Na 2.0, saccharin Na 0.1, methylparaben 0.1, flavor 0.8 wt.%, and H₂O balance.

ST dentifrice granule inorg binder pharmaceutical

IT Bentonite, biological studies

Kaolin, biological studies

RL: BIOL (Biological study)

(dentifrices from granules contg. pharmaceuticals and, as binder)

IT **Dentifrices**
 (granules contg. pharmaceuticals and **water-insol.**
 inorg. binders for)

IT 1344-28-1, Alumina, miscellaneous 7631-86-9, Silica, miscellaneous
 RL: MSC (Miscellaneous)
 (colloidal, **dentifrices** from granules contg. pharmaceuticals and, as binder)

IT 546-93-0, Magnesium carbonate 1309-42-8, Magnesium hydroxide
 1309-48-4, Magnesium oxide, biological studies 1318-93-0,
 Montmorillonite, biological studies 1335-30-4, Aluminum silicate
 1344-95-2, Calcium silicate 12304-65-3, Hydrotalcite 15551-62-9
 21645-51-2, Aluminum hydroxide, biological studies
 RL: BIOL (Biological study)
 (**dentifrices** from granules contg. pharmaceuticals and, as binder)

IT 55-56-1, Chlorhexidine 80-97-7, Dihydrocholesterol 275-51-4, Azulene
 369-77-7, Halocarban 499-44-5, Hinokitiol 516-95-0 1322-40-3,
 Trichloroacetonilide 1406-18-4, Vitamin E 1449-05-4, .beta.-
Glycyrrhetic acid 39660-61-2, Isopropylmethylphenol
 RL: BIOL (Biological study)
 (**dentifrices** from granules contg. **water-insol.** inorg. binders and)

L105 ANSWER 78 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1991:29955 HCPLUS

DN 114:29955

TI Medicinal plant extract-containing **mouthwashes** for oral disease control

IN Zheng, Wendiao; Li, Lianchun

PA Tianjin Institute of Light Industrial Chemistry, Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 12 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM A61K007-26

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1038935	A	19900124	CN 1989-104541	19890705 <--
PRAI CN 1989-104541		19890705		<--
OS MARPAT 114:29955				

AB The title **mouthwash** contains surfactants R1R2R3NO (R1 = C8-12 alkyl; R2, R3 = Me, Et), Lonicera japonica bud ext., Chrysanthemum monifolium flower ext., and **Glycyrrhiza uralensis** root ext., glycerol, propanediol, sorbitan, pentaerythritol, borneol, Na saccharin, flavors, and water. The preps. are effective in controlling **periodontitis** and other oral diseases.

ST **mouthwash** amine oxide oral disease control; medicinal plant ext
mouthwash

IT **Mouthwashes**

(contg. trialkylamine oxides and medicinal plant exts., for oral disease control)

IT Chrysanthemum monifolium

(flower, exts. of, **mouthwash** contg. amine oxides and, for oral disease control)

IT Surfactants

(trialkylamine oxides as, **mouthwash** contg. medicinal plant exts. and, for oral disease control)

IT Mouth

(disease, control of, medicinal plant ext.-contg **mouthwash**
for)

IT **Periodontium**
(disease, **periodontitis**, control of, medicinal plant
ext.-contg **mouthwash** for)

IT **Amines, oxides**
RL: BIOL (Biological study)
(tertiary, N-oxides, as surfactant, **mouthwash** contg.
medicinal plant exts. and, for oral disease control)

IT **Licorice**
(*G. uralensis*, root, exts. of, **mouthwash**
contg. amine oxides and, for oral disease control)

IT **Honeysuckle**
(*L. japonica*, buds, exts. of, **mouthwash** contg. amine oxides
and, for oral disease control)

IT 2605-78-9 13045-11-9 13045-12-0 24565-11-5
RL: BIOL (Biological study)
(as surfactant, **mouthwash** contg. medicinal plant exts. and,
for oral disease control)

IT 56-81-5, Glycerol, biological studies 115-77-5, uses and miscellaneous
12441-09-7, Sorbitan 26264-14-2, Propanediol
RL: BIOL (Biological study)
(**mouthwash** contg. surfactants and medicinal plant exts and,
for oral disease control)

L105 ANSWER 79 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1990:578259 HCAPLUS

DN 113:178259

TI Adhesive film containing lysozyme chloride for treatment of
gingivitis and pyorrhea

IN Takayanagi, Hitoshi; Nagata, Kyonori; Saigo, Takeji; Sawai, Yoshihiro

PA Kyukyu Yakuhin Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K037-54

ICS A61K009-70

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01279838	A2	19891110	JP 1988-108053	19880430 <--
	JP 05009412	B4	19930204		

PRAI JP 1988-108053 19880430 <--

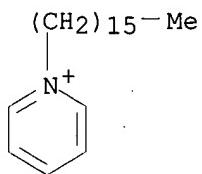
AB An adhesive water-sol. film for treatment of **gingivitis** and
pyorrhea contains lysozyme chloride and .gtoreq.1 compds. selected from
the group consisting of allantoin, hinokitiol, peppermint oil, tocopherol
acetate, chamomile tincture, **cetylpyridinium chloride**,
chlorohexidine-HCl, Et aminobenzoate, dibucaine-HCl, hexothiocaine-HCl,
decalinium chloride, **glycyrrhetic acid**, di-K
glycyrrhizinate, thymol, benzalkonium chloride, diphenhydramine
salicylate, nitrofurazone, Na Ca edetate, PhOH, Na Cu
chlorophyllin, and NaCl. The film itself is made of polyvinylpyrrolidone,
gelatins, poly(vinyl alc.), Na acrylate polymer, CM cellulose, starch,
etc. Thus, the adhesion tape was prep'd. consisting of hydroxylpropyl Me
cellulose acetate succinate, shellac, Macrogol-400, TiO₂, lysozyme
chloride, hydroxylpropyl cellulose, and a carboxyvinyl polymer.

ST adhesive film lysozyme **gingivitis**; pyorrhea adhesive film
lysozyme

IT Chamomile

(tinctures, adhesive film contg. lysozyme chloride and, for
gingivitis and pyorrhea treatment)

- IT Quaternary ammonium compounds, biological studies
 RL: BIOL (Biological study)
 (alkylbenzyldimethyl, chlorides, adhesive film contg. lysozyme chloride
 and, for **gingivitis** and pyorrhea treatment)
- IT Chlorophyllins
 RL: BIOL (Biological study)
 (copper complexes, sodium salts, adhesive film contg.
 lysozyme chloride and, for **gingivitis** and pyorrhea treatment)
- IT **Periodontium**
 (disease, compd. **periodontitis**, treatment of, adhesive film
 contg. lysozyme chloride for)
- IT **Gingiva**
 (disease, **gingivitis**, treatment of, adhesive film contg.
 lysozyme chloride for)
- IT Oils, essential
 RL: BIOL (Biological study)
 (peppermint, adhesive film contg. lysozyme chloride and, for
gingivitis and pyorrhea treatment)
- IT Pharmaceutical dosage forms
 (tapes, buccal, lysozyme chloride-contg., for **gingivitis** and
 pyorrhea treatment)
- IT 59-87-0, Nitrofurazone 61-12-1 62-33-9, Sodium calcium edetate
 89-83-8 97-59-6, Allantoin 108-95-2, Phenol, biological studies
123-03-5, Cetylpyridinium chloride
471-53-4, Glycyrrhetic acid 499-44-5,
 Hinokitiol 1333-08-0, Ethyl aminobenzoate 1406-70-8 3697-42-5,
 Chlorhexidine hydrochloride 7491-10-3 7647-14-5, Sodium chloride,
 biological studies **68797-35-3**, Dipotassium
glycyrrhizinate 115905-40-3, Decalinium chloride 129932-49-6,
 Hexothiocaine hydrochloride
 RL: BIOL (Biological study)
 (adhesive film contg. lysozyme chloride and, for **gingivitis**
 and pyorrhea treatment)
- IT 9066-59-5
 RL: BIOL (Biological study)
 (adhesive film contg., for **gingivitis** and pyorrhea treatment)
- IT **9000-36-6**, Karaya gum 9002-89-5, Poly(vinyl alcohol)
 9003-39-8, Polyvinylpyrrolidone **9004-32-4**, Carboxymethyl
 cellulose **9004-38-0**, Cellulose acetate phthalate
9004-64-2, Hydroxypropyl cellulose **9004-67-5**, Methyl
 cellulose **9005-25-8**, Starch, biological studies
9005-38-3, Sodium alginate **9050-31-1**, Hydroxypropyl
 methyl cellulose phthalate **11138-66-2**, Xanthan gum 25212-88-8,
 Ethyl acrylate-methacrylic acid copolymer 25549-84-2, Sodium acrylate
 polymer 37205-99-5, Carboxymethyl ethyl cellulose 71138-97-1,
 Hydroxypropyl methyl cellulose acetate succinate
 RL: BIOL (Biological study)
 (adhesive film manuf. with lysozyme chloride and, for
gingivitis and pyorrhea treatment)
- IT **123-03-5, Cetylpyridinium chloride**
471-53-4, Glycyrrhetic acid
68797-35-3, Dipotassium glycyrrhizinate
 RL: BIOL (Biological study)
 (adhesive film contg. lysozyme chloride and, for **gingivitis**
 and pyorrhea treatment)
- RN 123-03-5 HCPLUS
- CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)

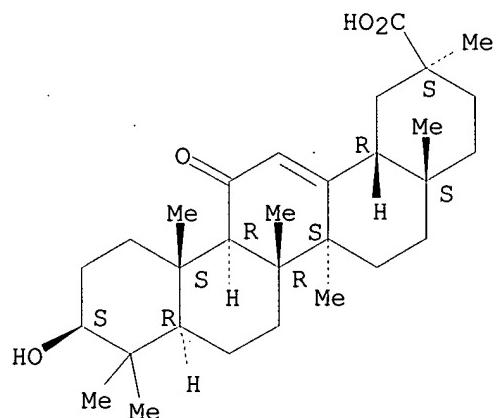


● Cl⁻

RN 471-53-4 HCAPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

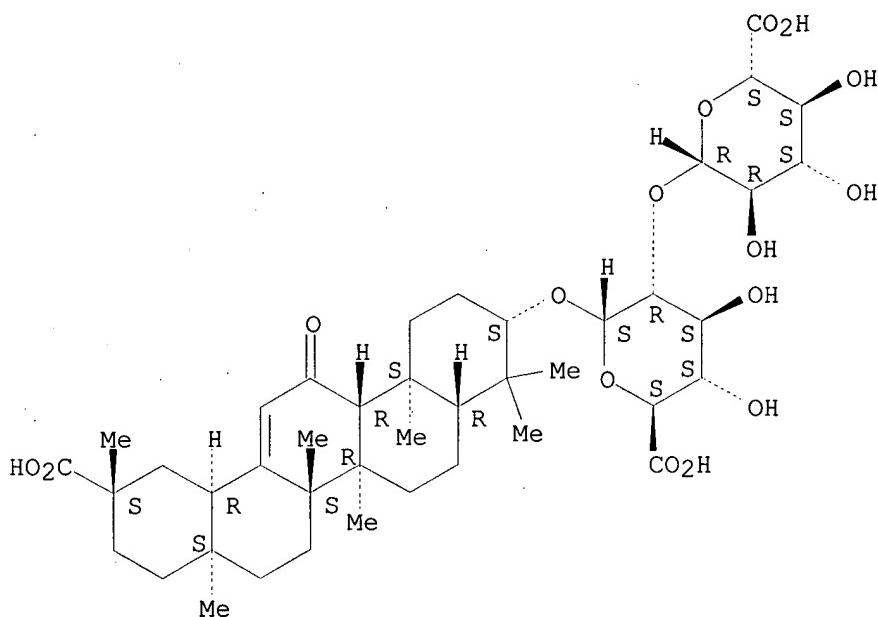


RN 68797-35-3 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

IT 9000-36-6, Karaya gum 9004-32-4, Carboxymethyl cellulose
 9004-38-0, Cellulose acetate phthalate 9004-64-2,
 Hydroxypropyl cellulose 9004-67-5, Methyl cellulose
 9005-25-8, Starch, biological studies 9005-38-3, Sodium
 alginate 9050-31-1, Hydroxypropyl methyl cellulose phthalate
 11138-66-2, Xanthan gum

RL: BIOL (Biological study)
 (adhesive film manuf. with lysozyme chloride and, for
 gingivitis and pyorrhea treatment)

RN 9000-36-6 HCPLUS

CN Karaya gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-32-4 HCPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

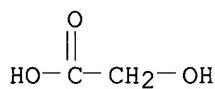
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1

CMF C2 H4 O3



RN 9004-38-0 HCPLUS

CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

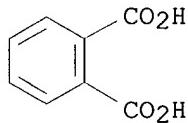
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 88-99-3

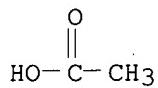
CMF C8 H6 O4



CM 3

CRN 64-19-7

CMF C2 H4 O2



RN 9004-64-2 HCPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

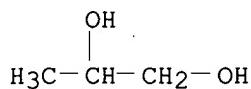
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6

CMF C3 H8 O2



RN 9004-67-5 HCPLUS
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

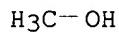
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1
 CMF C H4 O



RN 9005-25-8 HCPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-38-3 HCPLUS
 CN Alginic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9050-31-1 HCPLUS
 CN Cellulose, hydrogen 1,2-benzenedicarboxylate, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

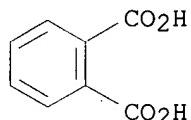
CM 1

CRN 9004-34-6
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 88-99-3
 CMF C8 H6 O4



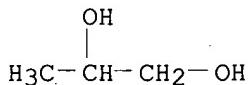
CM 3

CRN 67-56-1

CMF C H4 O

H₃C—OH

CM 4

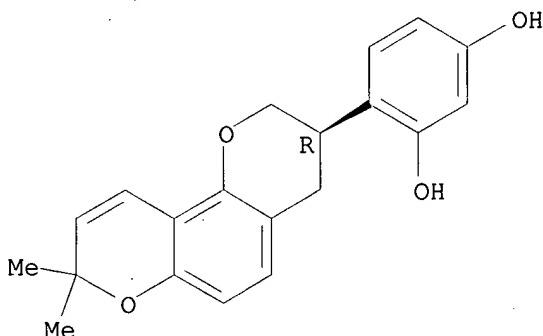
CRN 57-55-6
CMF C3 H8 O2RN 11138-66-2 HCPLUS
CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 80 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1989:502481 HCPLUS
 DN 111:102481
 TI Application to cosmetics of oil soluble
licorice extract
 AU Tsutsumi, Tatsuhiko
 CS Maruzenkasei Co., Onomichi, 722, Japan
 SO Fragrance Journal (1989), 17(6), 122-5
 CODEN: FUJAD7; ISSN: 0288-9803
 DT Journal
 LA Japanese
 CC 62-1 (Essential Oils and Cosmetics)
 Section cross-reference(s): 10, 11
 AB The biol. activities of exts. from **Glycyrrhiza glabra** and **G. inflata** were examd. The **G. glabra** prep (A) contained glabridin (10%) and glabrene (3%), and the **G. inflata** prep. (B) contained licochalcone A (20%) and licochalcone B (1.5%). The amt. for 50% inhibition of tyrosinase activity by the tyrosine to dopachrome reaction was 0.002 by A which was much less than 0.02 by the ext. of mulberry bark, 0.04 by baicalein, 0.05 by koji acid, and 0.16 mg by ascorbic acid. B Showed UV absorptions at 280-320 and 320-400 nm. The intensity at 320-400 nm was 1/3 of that of Parasole. A And B showed strong inhibition of peroxidized lipid prodn. The antidermal microorganism activities of A and B against *Staphylococcus aureus* and *Bacillus subtilis*, and those of A against *Penicillium citrinum* and *Candida albicans* were less than those of chlorohexidine gluconate soln.
 ST **licorice ext cosmetic; bactericide licorice ext cosmetic**
 IT Antioxidants
 Bactericides, Disinfectants, and Antiseptics
 (**licorice exts.** contg., for cosmetics)
 IT Cosmetics
 (**licorice exts.** for, biol. activities of)
 IT **Licorice**
 (**G. glabra, exts.**, biol activities and cosmetic uses of)
 IT **Licorice**
 (**G. inflata, exts.**, biol activities and cosmetic uses of)

IT 59870-68-7 60008-03-9
 RL: BIOL (Biological study)
 (of **Glycyrrhiza glabra exts.**, biol.
 activity and cosmetic use of)
 IT 58749-22-7, Licochalcone A 58749-23-8, Licochalcone B
 RL: BIOL (Biological study)
 (of **Glycyrrhiza inflata exts.**, biol. activity and
 cosmetic use of)
 IT 59870-68-7
 RL: BIOL (Biological study)
 (of **Glycyrrhiza glabra exts.**, biol.
 activity and cosmetic use of)
 RN 59870-68-7 HCPLUS
 CN 1,3-Benzenediol, 4-[(3R)-3,4-dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyan-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 81 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1989:225470 HCPLUS

DN 110:225470

TI **Glycyrrhizin from licorice as anticaries agent**

IN Hichi, Yasutake

PA Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-16

ICA A61K031-705; C07H015-256

CC 1-5 (Pharmacology)

Section cross-reference(s): 62

FAN.CNT 1

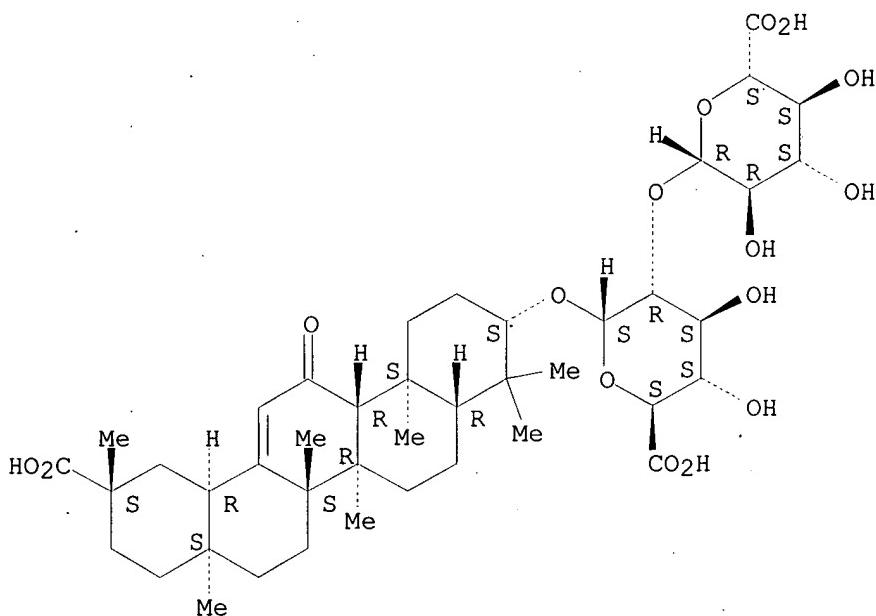
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63198616	A2	19880817	JP 1987-31206	19870213 <--
	JP 03022847	B4	19910327		

PRAI JP 1987-31206 19870213 <--

AB **Glycyrrhizin isolated from licorice prevents dental caries.** The inhibitory activity of **glycyrrhizin** on the formation of glucans and dental plaque was demonstrated in a culture medium contg. **Streptococcus mutans** and sucrose. **Glycyrrhizin** at .gtoreq.1 mM was effective in inhibiting dental plaque. Gymnemic acids extd. from leaves and stems of **Gymnema sylvestre** are added to oral formulations of **glycyrrhizin** to decrease the sweet taste of **glycyrrhizin**. Gymnemic acids are nontoxic to humans.

ST glycyrrhizin licorice tooth caries
 inhibitor
 IT Gymnemic acids
 RL: BIOL (Biological study)
 (dentifrices contg. glycyrrhizin as
 anticaries agent and)
 IT Dentifrices
 (glycyrrhizin as anticaries agent in)
 IT Licorice
 RL: BIOL (Biological study)
 (glycyrrhizin of, as anticaries agent)
 IT Tooth
 (disease, caries, inhibition of, by glycyrrhizin)
 IT 1405-86-3, Glycyrrhizin
 RL: BIOL (Biological study)
 (of licorice, as anticaries agent)
 IT 1405-86-3, Glycyrrhizin
 RL: BIOL (Biological study)
 (of licorice, as anticaries agent)
 RN 1405-86-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



L105 ANSWER 82 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1989:225458 HCPLUS
 DN 110:225458
 TI Effect of fluoride and glycyrrhizin mouthrinses on
 artificial caries lesions in vivo
 AU Deutchman, M.; Petrou, I. D.; Mellberg, J. R.
 CS Colgate-Palmolive Technol. Cent., Piscataway, NJ, USA
 SO Caries Research (1989), 23(3), 206-8
 CODEN: CAREBK; ISSN: 0008-6568
 DT Journal
 LA English
 CC 1-12 (Pharmacology)

Section cross-reference(s): 63

AB The **anticaries** effect of **glycyrrhizin** in vivo were detd. by studying its effect on mineral loss from artificial caries lesions. A fluoride rinse contg. 0.05% NaF was compared to a **glycyrrhizin** rinse contg. 1% **glycyrrhizic acid** ammonium salt. Lozenges contg. 1.0% **glycyrrhizic acid** ammonium salt were also tested. The amt. of mineral change was not different from placebo for the **glycyrrhizin** compds. An **anticaries** effect for **glycyrrhizin** is not supported by these findings.

ST **glycyrrhizin caries lesion**

IT **Mouthwashes**

(**glycyrrhizin** contg., **anticaries** and mineral loss effects of, in enamel of teeth)

IT **Tooth**

(disease, caries, **glycyrrhizin mouthrinse**
anticaries effect on, in relation to mineral loss)

IT 1405-86-3, **Glycyrrhizin**

RL: BIOL (Biological study)
(anticaries effect of and mineral loss from enamel of teeth response)

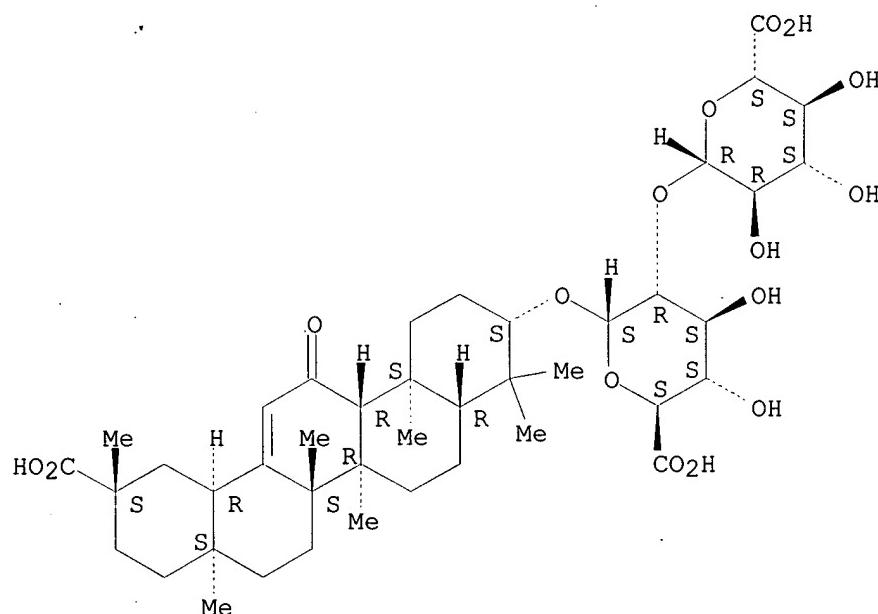
IT 1405-86-3, **Glycyrrhizin**

RL: BIOL (Biological study)
(anticaries effect of and mineral loss from enamel of teeth response)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 83 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1989:44800 HCPLUS

DN 110:44800

TI Solubilizing properties of **glycyrrhizin** and its derivatives:
solubilization of saikosaponin A, the saponin of Bupleuri Radix
AU Sasaki, Yasuhiro; Mizutani, Kenji; Kasai, Ryoji; Tanaka, Osamu

CS Sch. Med., Hiroshima Univ., Hiroshima, 734, Japan
 SO Chemical & Pharmaceutical Bulletin (1988), 36(9), 3491-5
 CODEN: CPBTAL; ISSN: 0009-2363
 DT Journal
 LA English
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 30, 33
 AB **Licorice** root is often co-prescribed with **Bupleuri Radix**
 (Bupleurum root) for decoctions used in oriental traditional medicine.
 The water soly. of saikosaponin A, the active principle of Bupleurum
 roots, was increased in the presence of the water ext. or the
 saponin fraction of **licorice** root and this solubilizing effect
 was due to **glycyrrhizin**, the major active saponin of this plant
 drug. A solubilizing effect on saikosaponin A was also obsd. with the
 30-.beta.-glucoside ester and 30-.beta.-glucuronide ester of
glycyrrhizin. The 30-.beta.-glucoside ester improved the
 solubilizing property of **glycyrrhizin**. Aq. solns. of the
 30-.beta.-glucoside ester and the 30-.beta.-glucuronide ester solubilized
 dl-.alpha.-tocopherol and oleanolic acid, both of which are almost
 insol. in water.
 ST **glycyrrhizin** solubilizer; saikosaponin solubilization
glycyrrhizin
 IT Solubilizers
 (**glycyrrhizin** and derivs., of **licorice** root, for
 saikasaponin A)
 IT **Licorice**
 RL: BIOL (Biological study)
 (**glycyrrhizin** of roots of, saikasaponin A solubilization by)
 IT Solubilization
 (of saikasaponin A, by **glycyrrhizin** and derivs. of
 licorice root)
 IT 114006-81-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and acetylation of)
 IT 118325-23-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and deacetylation of)
 IT 118325-24-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and hydrolysis of)
 IT 118342-92-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and reaction with acetobromoglucose or Me bromoglucuronate
 ester)
 IT 118325-25-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of and saikasaponin A solubilization by)
 IT 118325-22-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of and saikosaponin A solubilization by)
 IT 572-09-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with pentaacetate of **glycyrrhizin** esters)
 IT 1405-86-3, **Glycyrrhizin**
 RL: BIOL (Biological study)
 (solubilization of saikasaponin A by)
 IT 508-02-1, Oleanolic acid 10191-41-0 20736-09-8
 RL: PROC (Process)
 (solubilization of, by **glycyrrhizin** and derivs. of

licorice)

IT 1405-86-3, Glycyrrhizin

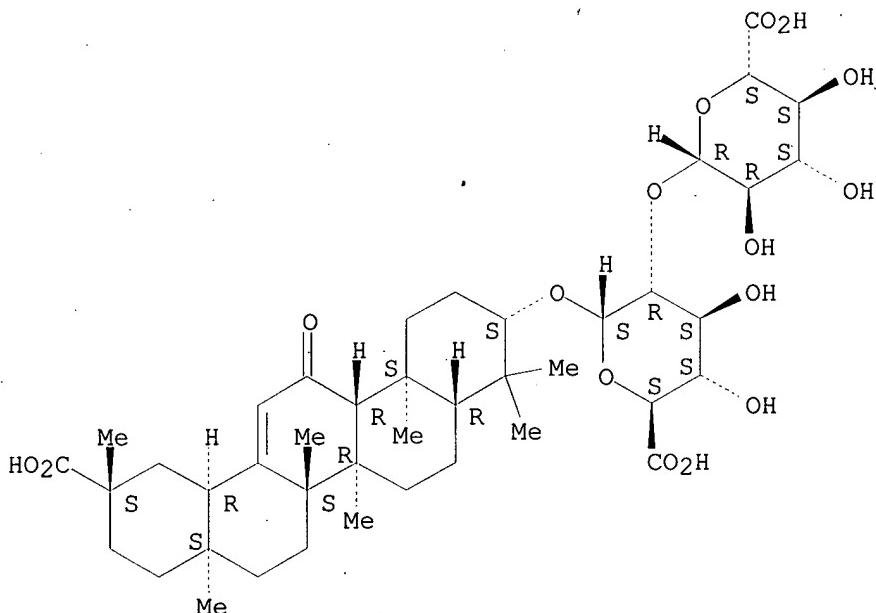
RL: BIOL (Biological study)

(solubilization of saikasaponin A by)

RN 1405-86-3 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 84 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1988:616041 HCAPLUS

DN 109:216041

TI Use of glycyrrhetic acid as a cicatrizing

IN Veyron, Helene; Giustiniani, Virginie

PA Fr.

SO Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K031-19

ICS A61K031-215

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

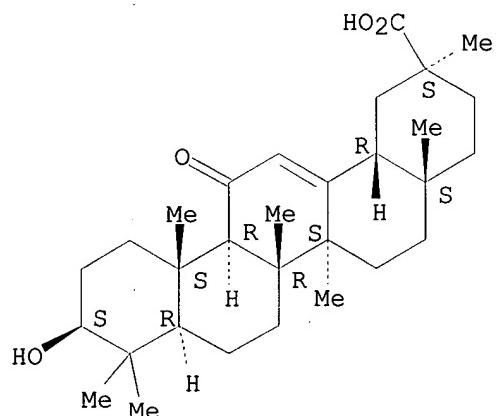
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 275222	A2	19880720	EP 1988-400037	19880108 <--
	EP 275222	A3	19900321		
	R: BE, CH, DE, ES, FR, GR, IT, LI, LU				
	FR 2609633	A1	19880722	FR 1987-371	19870115 <--
	FR 2609633	B1	19910329		

PRAI FR 1987-371 19870115 <--

AB Glycyrrhetic acid (I), preferably 18.beta.-I is a cicatrizing. An ointment contg. 18.beta.-I 1, HCHO 0.1, rongolite 0.05, and excipient to 100 g stimulated cicatrization in patients with gingival transplants and decreased serosity at the site of the wound.

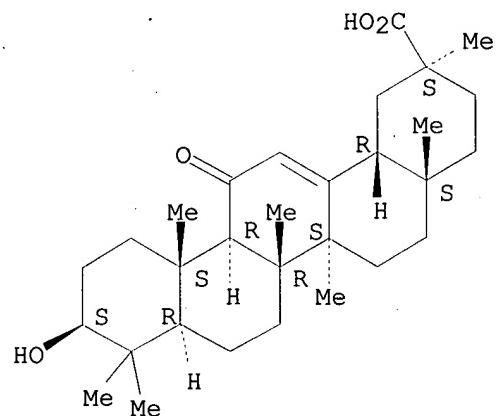
ST glycyrrhetic acid cicatrizant
 IT Wound healing
 (agents for, glycyrrhetinates as)
 IT 471-53-4, Glycyrrhetic acid
 471-53-4D, alkyl esters 1449-05-4, 18.alpha.-
 Glycyrrhetic acid 2508-76-1 51984-75-9,
 Benzyl glycyrrhetic acid 85985-61-1, Potassium glycyrrhetic acid
 117517-58-5, Phenyl glycyrrhetic acid
 RL: BIOL (Biological study)
 (cicatrizant)
 IT 471-53-4, Glycyrrhetic acid
 471-53-4D, alkyl esters 2508-76-1 85985-61-1,
 Potassium glycyrrhetic acid
 RL: BIOL (Biological study)
 (cicatrizant)
 RN 471-53-4 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.beta.,20.beta.)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



RN 471-53-4 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3.beta.,20.beta.)- (9CI) (CA
 INDEX NAME)

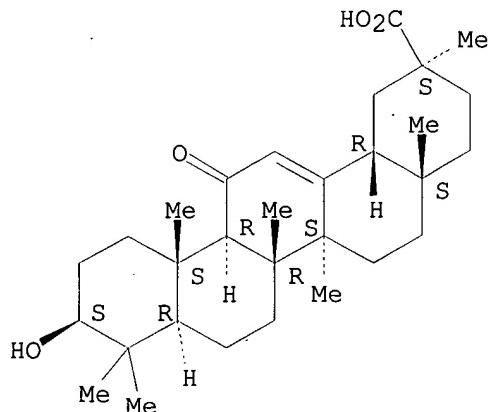
Absolute stereochemistry.



RN 2508-76-1 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, monosodium salt,

(3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

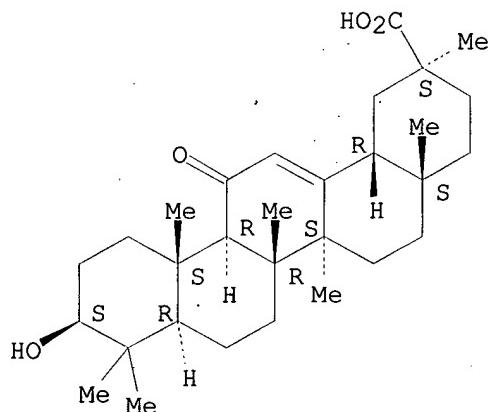


● Na

RN 85985-61-1 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, monopotassium salt,
(3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● K

L105 ANSWER 85 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1988:118764 HCPLUS

DN 108:118764

TI Antibacterial oral compositions containing linear and
cyclic polyphosphates for the prevention of calculus and
periodontal diseases

IN Miyake, Mikio; Takahashi, Akinori

PA Lion Corp., Japan

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent
 LA English
 IC ICM A61K007-16
 CC 62-7 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 254452	A2	19880127	EP 1987-306049	19870708 <--
	EP 254452	A3	19880518		
	EP 254452	B1	19931201		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	JP 63030408	A2	19880209	JP 1986-174026	19860724 <--
	JP 07091177	B4	19951004		
	AT 97801	E	19931215	AT 1987-306049	19870708 <--
	US 4913895	A	19900403	US 1987-76211	19870722 <--
PRAI	JP 1986-174026		19860724 <--		
	EP 1987-306049		19870708 <--		
AB	An oral compn. having antibacterial action against Actinomyces viscosus and which prevents the development of calculus and periodontitis contains (1) .gtoreq.1 phosphat eselected from the a group consisting of linear polyphosphates Mn+2PnO3n+1 (M = Na, K; n = .gtoreq.2) and cyclic polyphosphates (M1PO3)m (M1 = Na, K; m = .gtoreq.3), and (2) l-menthol, anethol, or their mixt. in an aq. medium. A toothpaste contained silicic anhydride 30.0, 60% sorbitol 25.0, thickening silica 2.0, propylene glycol 4.0, Na CM-cellulose 1.5, Na metaphosphate (n = 128) 2.0, l-menthol 0.1, spearmint oil 0.8, tranexamic acid 0.05, glycyrrhizin 0.01, saccharin Na 0.1, Na lauryl sulfate 1.2, and water to 100%. Culture media contg. A. viscosus and various Na polyphosphates with and without l-menthol were monitored for degree of bacterial growth by measuring the optical d. at 550 nm; the growth of A. viscosus was inhibited by the synergistic action of the polyphosphates in combination with l-menthol; furthermore, when Na tripolyphosphate or linear polyphosphates with d.p. >3 were used in combination with l-menthol, more improved synergistic effects were provided and thus a particularly effective antibacterial action was obtained.				
ST	dentifrice antibacterial polyphosphate				
IT	Dentifrices (antibacterial, contg. polyphosphates and menthol and/or anethol, for prevention of calculus and periodontal disease)				
IT	Actinomyces viscosus (inhibition of, dentifrices contg. polyphosphates and menthol and/or anethol for)				
IT	Oils, essential RL: BIOL (Biological study) (anise, dentifrices contg. polyphosphates and)				
IT	Mouthwashes (bactericidal, contg. polyphosphates and menthol and/or anethol, for prevention of calculus and periodontal disease)				
IT	Oils, essential RL: BIOL (Biological study) (mint, <i>Mentha arvensis piperascens</i> , dentifrices contg. polyphosphates and)				
IT	Oils, essential RL: BIOL (Biological study) (peppermint, dentifrices contg. polyphosphates and)				
IT	Polyphosphoric acids RL: BIOL (Biological study) (potassium salts, dentifrices contg. menthol and/or anethol and)				
IT	Polyphosphoric acids RL: BIOL (Biological study) (sodium salts, dentifrices contg. menthol and/or anethol and)				

IT Oils, essential
 RL: BIOL (Biological study)
 (spearmint, **dentifrices** contg. polyphosphates and)
 IT 7320-34-5, Potassium pyrophosphate 7722-88-5, Tetrasodium pyrophosphate
 7758-29-4, Sodium tripolyphosphate 7785-84-4, Sodium trimetaphosphate
 14986-84-6, Sodium tetrapolyphosphate
 RL: BIOL (Biological study)
 (**dentifrices** contg. menthol and/or anethol and)
 IT 104-46-1, Anethol 2216-51-5
 RL: BIOL (Biological study)
 (**dentifrices** contg. polyphosphates and)

L105 ANSWER 86 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1988:71979 HCAPLUS

DN 108:71979

TI Inhibition of the activity of glucosyltransferase from
Streptococcus mutans by **glycyrrhizin**

AU Sela, M. N.; Steinberg, D.; Segal, R.

CS Hadassah Fa. Dent. Med., Hebrew Univ., Jerusalem, Israel

SO Oral Microbiology and Immunology (1987), 2(3), 125-8

CODEN: OMIMEE; ISSN: 0902-0055

DT Journal

LA English

CC 10-6 (Microbial Biochemistry)

Section cross-reference(s): 7

AB **Glycyrrhizin**, the main saponin of licorice and a food flavoring, inhibits the adherence of **S. mutans** to glass in the presence of sucrose by inhibiting extracellular glucosyltransferase. The amt. of total and adherent glucans formed decreased and nonadherent glucans increased in the presence of **glycyrrhizin**. Two other surfactants, cetomacrogol-1000 and gypsophila saponin, did not affect glucan prodn. or glucosyltransferase activity.

ST **glycyrrhizin** **Streptococcus** glucosyltransferase; glucan
Streptococcus glycyrrhizin.

IT **Streptococcus mutans**
 (glucan formation and glucosyltransferase of, **glycyrrhizin**
 inhibition of)

IT 9012-72-0, Glucan
 RL: FORM (Formation, nonpreparative)
 (formation of, by **Streptococcus mutans**,
glycyrrhizin inhibition of)

IT 1405-86-3, **Glycyrrhizin**
 RL: BIOL (Biological study)
 (glucan formation and glucosyltransferase of **Streptococcus mutans** inhibition by)

IT 9031-48-5, Glucosyltransferase
 RL: PROC (Process)
 (of **Streptococcus mutans**, **glycyrrhizin**
 inhibition of)

IT 9012-72-0, Glucan
 RL: FORM (Formation, nonpreparative)
 (formation of, by **Streptococcus mutans**,
glycyrrhizin inhibition of)

RN 9012-72-0 HCAPLUS
 CN D-Glucan (9CI) (CA INDEX NAME)

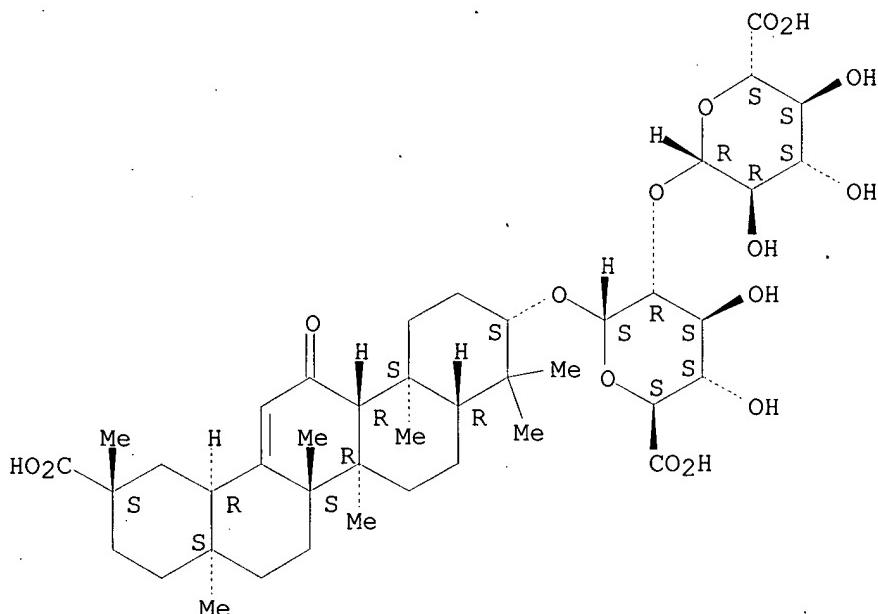
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 1405-86-3, **Glycyrrhizin**
 RL: BIOL (Biological study)
 (glucan formation and glucosyltransferase of **Streptococcus mutans** inhibition by)

RN 1405-86-3 HCAPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 87 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1987:446132 HCPLUS

DN 107:46132

TI Studies on dental **caries** prevention by traditional medicines (IX). Potent antibacterial action of coumarin derivatives from licorice roots against **Streptococcus mutans**

AU Hattori, Masao; Miyachi, Kumi; Shu, Yue Zhong; Kakiuchi, Nobuko; Namba, Tsuneo

CS Res. Inst. Wakan-Yaku, Toyama Med. Pharm. Univ., Toyama, 930-01, Japan

SO Shoyakugaku Zasshi (1986), 40(4), 406-12

CODEN: SHZAAY; ISSN: 0037-4377

DT Journal

LA English

CC 63-4 (Pharmaceuticals)

Section cross-reference(s): 10

AB Glycyrol, glycyrin, isoglycyrol and glycycooumarin isolated from the methanolic ext. of licorice roots (**Glycyrrhiza uralensis**) had potent antibacterial action against a **cariogenic** bacterium, **S. mutans**. The former two compds. completely inhibited bacterial growth at 6.25% .mu.g/mL and the latter two at 12.5 .mu.g/mL, detd. by the tube diln. technique. The four coumarins were contained in licorice roots from the northeast and southeast regions of China, but not in those from Sinkiang, the Soviet Union and Afghanistan.

ST licorice coumarin deriv bactericide **Streptococcus**

IT **Streptococcus mutans**

(coumarin derivs. from licorice roots antibacterial activity against)

IT Antibiotics

(coumarin derivs. from licorice roots as, against **Streptococcus mutans**)

IT Licorice

(*G. uralensis*, coumarin derivs. from root of,
antibacterial activity of, against *Streptococcus
mutans*)

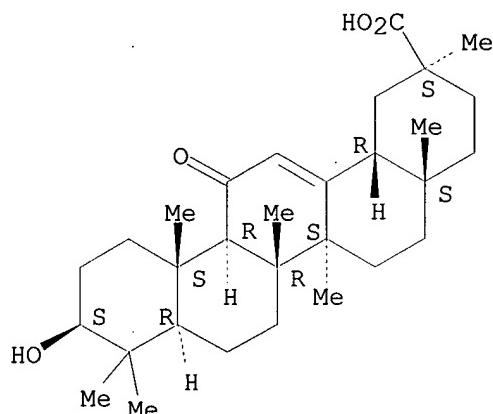
IT 471-53-4 472-15-1, Betulinic acid 479-13-0, Coumestrol
479-13-0D, di-Me derivs. 485-72-3 551-15-5, Liquiritin 578-86-9,
Liquiritigenin 961-29-5, Isoliquiritigenin 1405-86-3,
Glycyrrhizin 5041-81-6, Isoliquiritin 23013-84-5, Glycyrol
23013-86-7, Isoglycyrol 66056-18-6, Glycyrin 94805-82-0, Glycycoumarin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(from licorice roots, bactericidal activity of, against
Streptococcus mutans)

IT 471-53-4 1405-86-3, **Glycyrrhizin**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(from licorice roots, bactericidal activity of, against
Streptococcus mutans)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA
INDEX NAME)

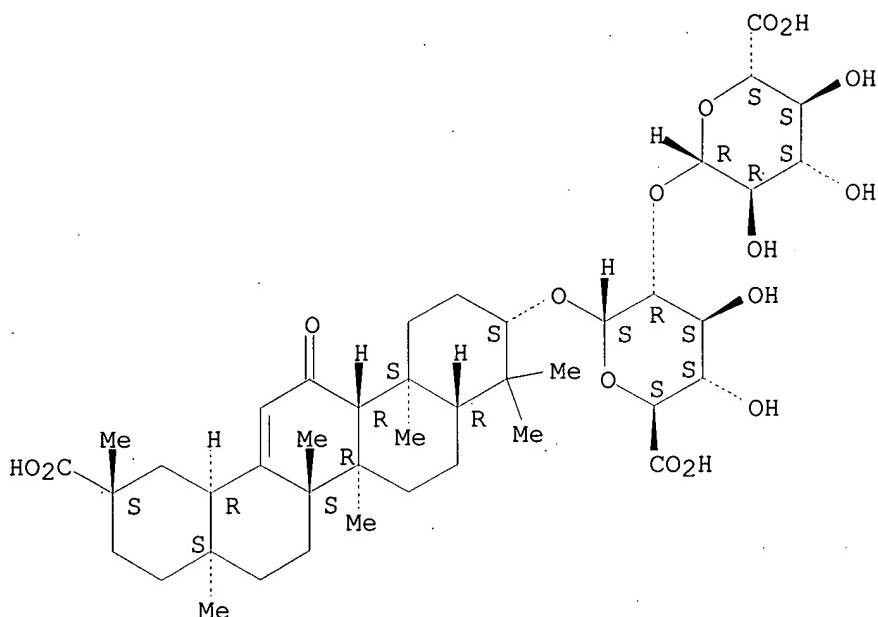
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



L105 ANSWER 88 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1987:412961 HCPLUS

DN 107:12961

TI Adhesive oral bandages and oral pharmaceutical preparations

IN Inoue, Yuichi; Horiuchi, Tetuo; Hasegawa, Kenji; Nakashima, Koichi; Ysuyoshi, Takashi

PA Nitto Electric Industrial Co., Ltd., Japan; Sunstar, Inc.

SO Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K009-70

ICS A61L015-06

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 200508	A2	19861210	EP 1986-303170	19860425 <--
	EP 200508	A3	19870708		
	EP 200508	B1	199111002		
	R: CH, DE, FR, GB, LI, NL, SE				
	JP 61249472	A2	19861106	JP 1985-91580	19850427 <--
	JP 63045829	B4	19880912		
	JP 61249473	A2	19861106	JP 1985-91581	19850427 <--
	JP 63045830	B4	19880912		
	US 4772470	A	19880920	US 1986-855565	19860425 <--
PRAI	JP 1985-91580		19850427 <--		
	JP 1985-91581		19850427 <--		

AB Oral bandages with good prolonged adhesion consist of a soft adhesive film of a compatible polycarboxylic acid and/or anhydride and a vinyl acetate copolymer. The vinyl acetate copolymer has an av. mol. wt. of >60,000; the polycarboxylic acid contains .gtoreq.20 wt. % COOH group [or .gtoreq.16 wt. % C(:O)OC(:O) group for the polycarboxylic acid anhydride]. Topical drugs or pharmaceuticals incorporated into the bandage are gradually released and do not readily wash out. Addnl. components (e.g., basic materials for neutralization of polycarboxylic acids) can also be

present. Carboxyvinyl polymer 4.7, poly(vinyl acetate) (d.p. .apprx.1500) 4.7, and diisopropanolamine 0.6 wt. parts were poured into 90 parts MeOH and mixed to form a uniform soln., which was flow casted on dried (at 80.degree. for 8 min) polyethylene-laminated paper and peeled off to prep. an adhesive film (thickness 40.mu.). The dissoln. ratio of the polycarboxylic acid was 12%, which indicated compatibility. The adhesive film was laminated on a 40.mu. poly(vinyl acetate) film (d.p. .apprx.2000) by hot pressing to obtain an oral bandage, which, when contg. dipotassium glycyrrhettinate and applied to the **gingival** mucosa of an 8-yr-old female, aided healing of a wound due to toothbrushing.

ST oral bandage carboxyvinyl polymer adhesive; polyvinyl acetate carboxyvinyl polymer adhesive; topical mouth bandage gradual release; **tooth** mouth disease topical bandage; **halitosis** topical oral bandage; **gingivitis** topical oral bandage

IT **Lithospermum**
(root ext., topical application of, in mouth, adhesive oral bandages for)

IT **Mouth**
(wound, treatment of, adhesive oral bandage contg. topical drug for)

IT **Medical goods**
(bandages, oral, adhesive, contg. poly(vinyl acetate)-carboxyvinyl polymer compn.)

IT **Vinyl compounds, polymers**
RL: BIOL (Biological study)
(carboxy-contg., polymers, composites, contg. poly(vinyl acetate), as adhesive oral bandages)

IT **Pharmaceutical dosage forms**
(controlled-release, adhesive oral bandages for)

IT **Tooth**
(dentin, disease, treatment of, adhesive oral bandage contg. topical drug for)

IT **Periodontium**
(disease, treatment of, adhesive oral bandage contg. topical drug for)

IT **Gingiva**
(disease, **gingivitis**, treatment of, adhesive oral bandage contg. topical drug for)

IT **Mouth**
(disease, **halitosis**, treatment of, adhesive oral bandage contg. topical drug for)

IT **Mouth**
(mucosa, adhesive bandages for, contg. carboxyvinyl polymer-poly(vinyl acetate) composites)

IT 9003-20-7, Poly(vinyl acetate) 9003-20-7D, Poly(vinyl acetate), hydrolyzed

RL: BIOL (Biological study)
(composites, contg. carboxyvinyl polymers, as adhesive oral bandages)

IT 9003-01-4, Polyacrylic acid 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 24937-78-8, Ethylene-vinyl acetate copolymer

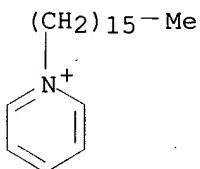
RL: BIOL (Biological study)
(composites, contg. poly(vinyl acetate), as adhesive oral bandages)

IT 50-02-2, Dexamethasone 50-03-3, Hydrocortisone acetate 50-24-8, Prednisolone 61-12-1, Dibucaine hydrochloride 64-75-5, Tetracycline hydrochloride 76-25-5, Triamcinolone acetonide 94-09-7, Ethyl aminobenzoate 96-88-8, Mepivacaine 123-03-5,

Cetylpyridinium chloride 137-58-6, Lidocaine 522-51-0 1197-18-8, Tranexamic acid 1405-10-3 2216-51-5 3697-42-5, Chlorhexidine hydrochloride 7681-49-4, Sodium fluoride, biological studies 9066-59-5, Lysozyme chloride 10476-85-4, Strontium chloride 18917-91-4, Aluminum lactate 23327-65-3, Dipotassium glycyrrhettinate 32222-06-3, Calcitriol 41294-56-8 43119-47-7, Tocopherol nicotinate 57333-96-7 75869-04-4

RL: BIOL (Biological study)
(topical application of, in mouth, adhesive oral bandages for)

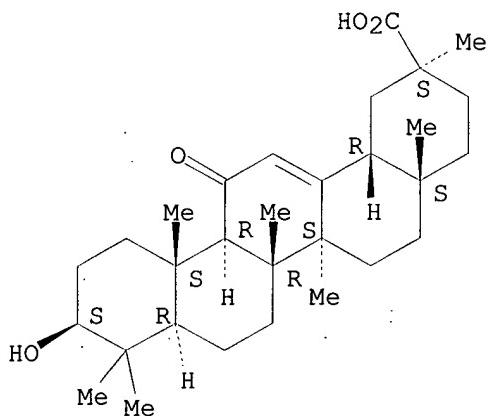
IT 123-03-5, Cetylpyridinium chloride
 23327-65-3, Dipotassium glycyrrhetinate
 RL: BIOL (Biological study)
 (topical application of, in mouth, adhesive oral bandages for)
 RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl-

RN 23327-65-3 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, dipotassium salt,
 (3. β ,20. β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

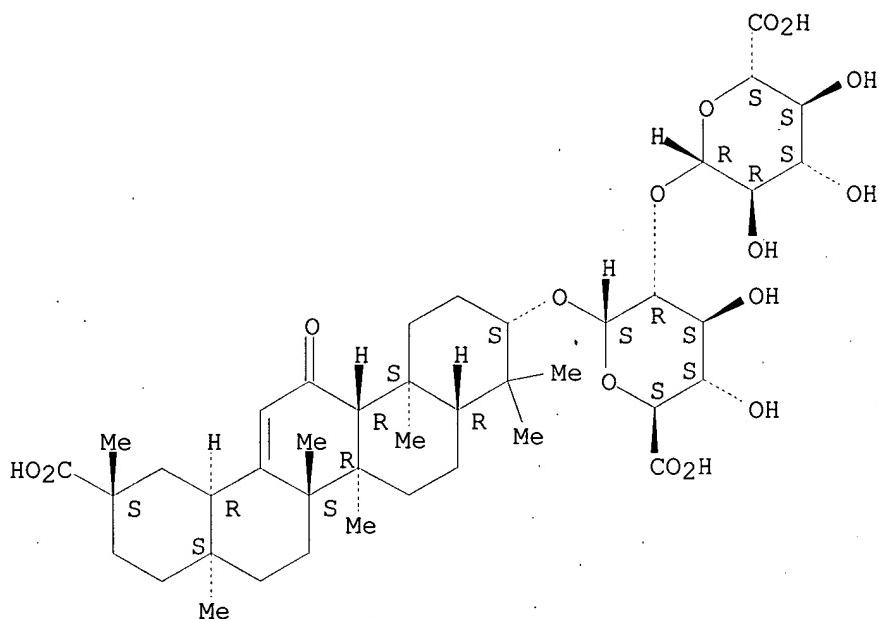


● 2 K

L105 ANSWER 89 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1987:55907 HCPLUS
 DN 106:55907
 TI Topical pharmaceutical compositions containing
 glycyrrhizin
 IN Segal, Ruth; Pisanty, Sara; Azaz, Emma
 PA Yissum Research Development Co., Israel; Hebrew University of Jerusalem
 SO Brit. UK Pat. Appl., 6 pp.
 CODEN: BAXXDU
 DT Patent
 LA English
 IC ICM A61K031-70
 CC 63-6 (Pharmaceuticals)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2167296	A1	19860529	GB 1984-29749	19841124 <--
	GB 2167296	B2	19881116		
PRAI	GB 1984-29749		19841124 <--		
AB	Topical compns. for treatment of oral, nasal, and genital diseases contain glycyrrhizin (I) which is an excellent dispersing agent and forms stable gels with good rheol. properties. It shows synergistic effects with antibiotics, fungicides, antiinflammatory steroids, virucides, etc. A compn. for treatment of mucosal, oral, nasal, or genital lesions caused by Herpes simplex contained idoxuridine 0.2, I 2.0, and BzOH 0.1% in H ₂ O.				
ST	glycyrrhizin topical pharmaceutical				
IT	Mouthwashes (glycyrrhizin in, anticariogenic)				
IT	Antibiotics Fungicides and Fungistats Inflammation inhibitors Virucides and Virustats Corticosteroids, biological studies Estrogens Steroids, biological studies RL: BIOL (Biological study) (topical pharmaceuticals contg. glycyrrhizin and)				
IT	Tooth (disease, caries , treatment of, glycyrrhizin compns. contg. fluoride for)				
IT	Pharmaceutical dosage forms (topical, glycyrrhizin in)				
IT	7681-49-4, Sodium fluoride, biological studies RL: BIOL (Biological study) (anticariogenic gels and mouthwashes contg. glycyrrhizin and)				
IT	50-28-2, Estradiol, biological studies 72-33-3 124-94-7 1400-61-9 1405-87-4 RL: BIOL (Biological study) (oral topical pharmaceutical gels contg. glycyrrhizin and)				
IT	54-42-2, Idoxuridine RL: BIOL (Biological study) (topical pharmaceutical gels contg. glycyrrhizin and, for herpes simplex lesion treatment)				
IT	1405-86-3, Glycyrrhizin RL: BIOL (Biological study) (topical pharmaceuticals contg., for skin lesion treatment)				
IT	1405-86-3, Glycyrrhizin RL: BIOL (Biological study) (topical pharmaceuticals contg., for skin lesion treatment)				
RN	1405-86-3 HCAPLUS				
CN	.alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-. β -D-glucopyranuronosyl- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.



L105 ANSWER 90 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1986:520776 HCPLUS

DN 105:120776

TI Composition containing **glycyrrhizin** and an active ingredient

IN Segal, Ruth; Pisanty, Sara; Azaz, Emma

PA Yissum Research Development Co., Israel

SO Ger. Offen., 15 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A61K031-70

ICS A61K047-00; A61K031-71; A61K031-57; A61K031-565; A61K033-16

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3443242	A1	19860528	DE 1984-3443242	19841127 <--
	US 4678772	A	19870707	US 1984-654148	19840925 <--
	CH 662510	A	19871015	CH 1984-5651	19841127 <--
	FR 2573655	A1	19860530	FR 1984-18155	19841129 <--
	FR 2573655	B1	19900720		

PRAI US 1983-470293 19830228 <--

DE 1984-3443242 19841127 <--

AB A pharmaceutical compn., esp. for oral infections and herpes virus wounds, contains **glycyrrhizin** 0.5-2.0% by wt. and an active substance, e.g. antimycotic, antibiotic, steroid, **anticariogenic** material, in an aq. carrier. Thus, an antibiotic gel for treating oral infections contained neomycin 0.5, bacitracin 1, and **glycyrrhizin** 1.25% in water.

ST **glycyrrhizin** antibiotic oral infection

IT Estrogens

RL: BIOL (Biological study)
(conjugates, pharmaceutical contg. **glycyrrhizin** and, for oral infection and Herpes wound treatment)

IT Antibiotics

Fungicides and Fungistats
Steroids, biological studies

RL: BIOL (Biological study)
 (pharmaceutical contg. **glycyrrhizin** and, for oral infection
 and Herpes wound treatment)

IT **Tooth**
 (disease, **caries**, treatment of, **glycyrrhizin**-contg.
 pharmaceutical for)

IT Mouth
 (disease, infection, treatment of, **glycyrrhizin**-contg.
 pharmaceutical for)

IT Mouth
 (disease, stomatitis, treatment of, **glycyrrhizin**-contg.
 pharmaceutical for)

IT Virus, animal
 (herpes, infection with, treatment of, **glycyrrhizin**-contg.
 pharmaceutical for)

IT 50-28-2, biological studies
 RL: BIOL (Biological study)
 (pharmaceutical compn. **glycyrrhizin** and, for oral disorders
 treatment)

IT **1405-86-3**
 RL: BIOL (Biological study)
 (pharmaceutical contg. antibiotic and, for oral infection and Herpes
 wound treatment)

IT 72-33-3
 RL: BIOL (Biological study)
 (pharmaceutical contg. **glycyrrhizin** and, for oral disorders
 treatment)

IT 1400-61-9
 RL: BIOL (Biological study)
 (pharmaceutical contg. **glycyrrhizin** and, for oral fungal
 infection treatment)

IT 124-94-7
 RL: BIOL (Biological study)
 (pharmaceutical contg. **glycyrrhizin** and, for oral
 inflammation treatment)

IT 54-42-2
 RL: BIOL (Biological study)
 (pharmaceutical contg. **glycyrrhizin** and, for oral viral
 infection treatment)

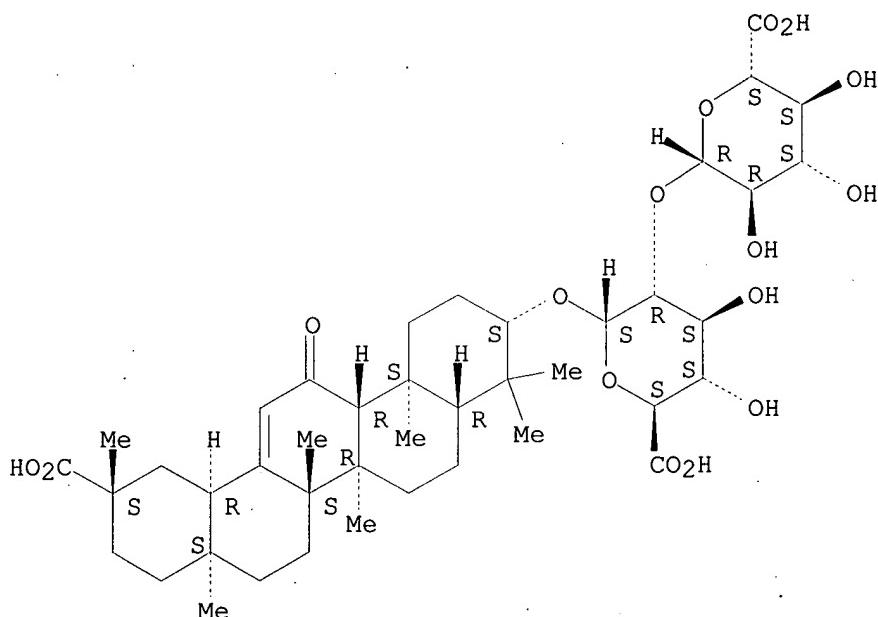
IT 7681-49-4, biological studies
 RL: BIOL (Biological study)
 (pharmaceutical contg. **glycyrrhizin** and, for **tooth**
caries treatment)

IT **1405-86-3**
 RL: BIOL (Biological study)
 (pharmaceutical contg. antibiotic and, for oral infection and Herpes
 wound treatment)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-. β .-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



L105 ANSWER 91 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1986:401869 HCPLUS

DN 105:1869

TI Surfactant-induced alterations of permeability of rabbit oral mucosa in vitro

AU Siegel, Ivens A.; Gordon, Herbert P.

CS Cent. Res. Oral Biol., Univ. Washington, Seattle, WA, 98195, USA

SO Experimental and Molecular Pathology (1986), 44(2), 132-7

CODEN: EXMPA6; ISSN: 0014-4800

DT Journal

LA English

CC 4-3 (Toxicology)

AB The permeability of rabbit oral mucosa to 8 nonelectrolytes was measured in vitro in the absence and presence of 0.025, 0.1, or 1.0% anionic, cationic, and nonionic surfactants. The anionic surfactant, SDS [151-21-3], and the cationic surfactants, cetyltrimethylammonium bromide [57-09-0] and **cetylpyridinium chloride** [123-03-5], caused greater increases in permeability than polysorbate 80 [9005-65-6], a nonionic surfactant. The increases in permeability brought about by the surfactants were concn.-dependent.

ST surfactant mouth mucosa permeability

IT Penetrating agents

(by oral mucosa, surfactants effect on)

IT Mouth

(mucosa, chems. penetration by, surfactant effect on)

IT 57-09-0 123-03-5 151-21-3, biological studies 9005-65-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(chem. penetration by oral mucosa response to)

IT 57-13-6, biological studies 57-50-1, biological studies

71-23-8, biological studies 107-21-1, biological studies

.9004-54-0, biological studies 9005-80-5 33969-55-0

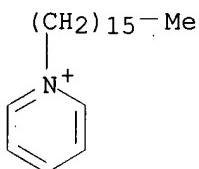
RL: BIOL (Biological study)

(penetration of, by oral mucosa, surfactants effect on)

IT 123-03-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

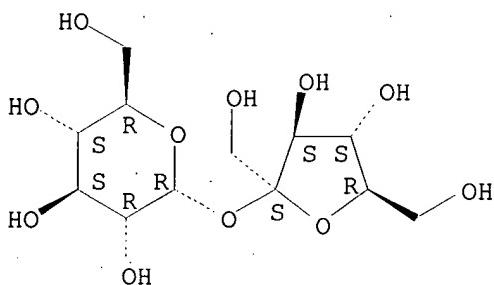
(chem. penetration by oral mucosa response to)
 RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl⁻

IT 57-50-1, biological studies 9004-54-0, biological
 studies 9005-80-5
 RL: BIOL (Biological study)
 (penetration of, by oral mucosa, surfactants effect on)
 RN 57-50-1 HCPLUS
 CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9004-54-0 HCPLUS
 CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9005-80-5 HCPLUS
 CN Inulin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 92 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1986:213037 HCPLUS
 DN 104:213037
 TI Oral compositions containing tocopherol or its esters
 IN Fukuchi, Naoji; Suganuma, Nobuo; Yoshie, Makoto; Ito, Satoshi
 PA Lion Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A61K007-16
 CC 62-7 (Essential Oils and Cosmetics)
 FAN.CNT 2
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ----- ----- ----- -----

PI JP 61036210 A2 19860220 JP 1984-155472 19840727 <--
 JP 07025658 B4 19950322
 ES 545612 A1 19870216 ES 1985-545612 19850726 <--
 PRAI JP 1984-155472 19840727 <--
 JP 1984-278850 19841227 <--
 AB Oral compns. contain tocopherol or its esters and anionic surfactants (as stabilizers). Tocopherols are effective in preventing periodontal disease. Thus, a toothpaste consisted of CaHPO4.cntdot.2H2O 50, CM-cellulose Na 0.5, carrageenan 0.5, sorbitol 15, glycerin 15, propylene glycol 2, Na lauryl sulfate 1, lauric acid diethanolamide 0.3, myristic acid diethanolamide 0.3, tocopherol acetate 0.05, .epsilon.-aminocaproic acid 0.01, allantoinate 0.01, .beta.-glycyrrhetic acid 0.01, chlorhexidine gluconate 0.01, methylparaben 0.05, Na benzoate 0.3, saccharin Na 0.1, flavor 1, and purified H2O to 100%.
 ST dentifrice tocopherol anionic surfactant
 IT Dentifrices (anionic surfactants and tocopherols for)
 IT Surfactants (anionic, dentifrices contg. tocopherols and, stability in relation to)
 IT Amides, uses and miscellaneous
 RL: USES (Uses)
 (coco, N,N-bis(hydroxyethyl), dentifrices contg. tocopherols and, stability in relation to)
 IT 1406-70-8 43119-47-7
 RL: BIOL (Biological study)
 (dentifrices contg. anionic surfactants and, stability in relation to)
 IT 120-40-1 7545-23-5 7545-24-6
 RL: BIOL (Biological study)
 (dentifrices contg. tocopherols and, stability in relation to)

L105 ANSWER 93 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1986:135880 HCPLUS
 DN 104:135880
 TI Stomastic gargle
 IN Fung, Paul S. T.; Chen, Yun Tsu
 PA Taiwan
 SO U.S., 3 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K007-16
 ICS A61K007-18; A61K007-26
 NCL 424052000
 CC 62-7 (Essential Oils and Cosmetics)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4548809	A	19851022	US 1984-594486	19840327 <--
PRAI US 1984-594486		19840327 <--		

AB A nonstimulating stomatic gargle is prep'd. with 3 types of liqs., i.e., liq. A contg. menthol, eugenol, and eucalyptus oil dissolved in EtOH; liq. B contg. licorice ext. dissolved in H2O; and liq. C contg. Na monofluorophosphate and NaF in H2O. Liq. C is added to liq. B and glycerol, perfume, nonionic surfactant, and Na dehydroacetate are added and the whole agitated at a low speed for 3-7 min. Then, perfume and flavor additives are added. Then, liq. A is added to the mixt. together with H2O, EtOH, and chlorophyll to obtain a transparent and green gargle. The gargle can clean acid residues from between the teeth, kill bacteria in the mouth and throat, prevent the

teeth from having cavities and the gums from **gingivitis** or bleeding, remove the **halitosis** and dry feeling in the mouth and throat so as to maintain the mouth in a clean state. A **gargle** contained chlorophyll 0.001, Na monofluorophosphate 0.250, NaF 0.250, menthol 0.200, eugenol 0.040, **licorice** 0.300, glycerol 3.000, EtOH 40.000 perfumes 0.500, nonionic surfactant 0.025, Na dehydroacetate 0.040, H₂O 53.394, and eucalyptus oil 2.000 %.

ST stomatic **gargle** nonstimulating

IT Oils

RL: BIOL (Biological study)
(eucalyptus, stomatic **gargle** contg.)

IT **Licorice**

RL: BIOL (Biological study)
(ext., stomatic **gargle** contg.)

IT **Mouthwashes**

(stomastic, without stimulating effect)

IT **Surfactants**

(nonionic, stomatic **gargles** contg.)

IT 56-81-5, biological studies 64-17-5, biological studies 97-53-0
479-61-8 1490-04-6 4418-26-2 7681-49-4, biological studies
10163-15-2

RL: BIOL (Biological study)
(stomastic **gargle** contg.)

L105 ANSWER 94 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1986:31601 HCPLUS

DN 104:31601

TI Studies on dental **caries** prevention by traditional medicines
(Part VII). Screening of ayurvedic medicines for anti-plaque action

AU Namba, Tsuneo; Tsuneyzuka, Masa; Dissanayake, D. M. R. B.; Pilapitiya, Upali; Saito, Keiko; Kakiuchi, Nobuko; Hattori, Masao

CS Res. Inst. Wakan-Yaku, Toyama Med. Pharm. Univ., Toyama, 930-01, Japan

SO Shoyakugaku Zasshi (1985), 39(2), 146-53

CODEN: SHZAAY; ISSN: 0037-4377

DT Journal

LA English

CC 10-5 (Microbial Biochemistry)

Section cross-reference(s): 63

AB In the course of basic studies on the dental **caries** prevention by traditional medicines, various crude drugs used in Sri Lanka were screened for antiplaque action against **Streptococcus mutans**. Both the methanolic and 50% methanolic exts. of Welmii (the roots of **Glycyrrhiza glabra**) and Kaluduru (the seeds of **Nigella sativa**), and the methanolic exts. of Wasawasi (the aril of **Myristica fragrans**), Satakappa (the seeds of **Peucedanum graveolens**), Wal-Bevilu (the root of **Sida cordifolia**), and Walagasal (the fruit of **Embelia ribes**) potently inhibited adherence of viable cells of **S. mutans** to smooth surfaces with a 50% inhibitory concn. (IC50) of 10-30 .mu.g/mL. The methanolic exts. of Welmii and Walagasal both had antibacterial action against **S. mutans** and antienzymic action against glucosyltransferase. Though active principles of the former ext. are not yet clear, that of the latter ext. was identified as embelin, which inhibited the bacterial growth with a min. inhibitory concn. of 62.5 .mu.g/mL and the glucan synthesis with an IC50 of 125 .mu.g/mL.

ST tooth **caries** prevention ayurvedic medicine;

Streptococcus adhesion antiplaque ayurvedic medicine

IT **Streptococcus mutans**

(dental plaque formation by, ayurvedic medicines inhibition of)

IT Dill

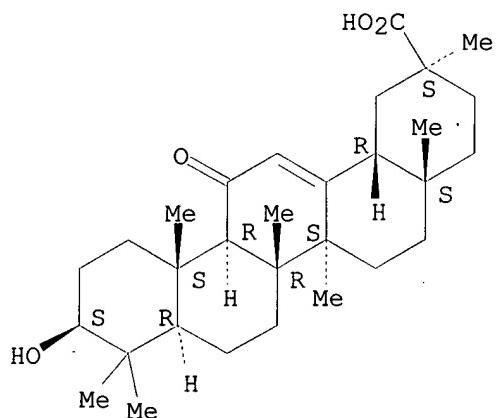
Embelia ribes

Magnolia obovata
 Magnolia officinalis
 Myristica fragrans
 Nigella sativa
 Sida cordifolia
 (ext. of, **Streptococcus mutans** sensitivity to,
 plaque prevention in relation to)
 IT Adhesion
 (bio-, of **Streptococcus mutans**, ayurvedic medicines
 inhibition of)
 IT Tooth
 (disease, **caries**, prevention of, ayurvedic medicines in
 relation to)
 IT Tooth
 (**plaque**, prevention of, ayurvedic medicines in relation to)
 IT Licorice
 (G. glabra, ext. of, **Streptococcus**
 mutans sensitivity to, **plaque** prevention in relation
 to)
 IT 9012-72-0
 RL: FORM (Formation, nonpreparative)
 (formation of, by **Streptococcus mutans**, ayurvedic
 medicines inhibition of)
 IT 9031-48-5
 RL: BIOL (Biological study)
 (of **Streptococcus mutans**, **Glycyrrhiza**
 glabra and Embelia ribes exts. inhibition of, dental
 plaque prevention in relation to)
 IT 471-53-4 551-15-5 578-86-9 961-29-5 1405-86-3
 5041-81-6 34445-07-3
 RL: BIOL (Biological study)
 (**Streptococcus mutans** and glucosyltransferase
 inhibition by, dental **plaque** prevention in relation to)
 IT 550-24-3
 RL: BIOL (Biological study)
 (**Streptococcus mutans** sensitivity to, dental
 plaque prevention in relation to)
 IT 9012-72-0
 RL: FORM (Formation, nonpreparative)
 (formation of, by **Streptococcus mutans**, ayurvedic
 medicines inhibition of)
 RN 9012-72-0 HCPLUS
 CN D-Glucan (9CI) (CA INDEX NAME)

 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 471-53-4 1405-86-3
 RL: BIOL (Biological study)
 (**Streptococcus mutans** and glucosyltransferase
 inhibition by, dental **plaque** prevention in relation to)
 RN 471-53-4 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA
 INDEX NAME)

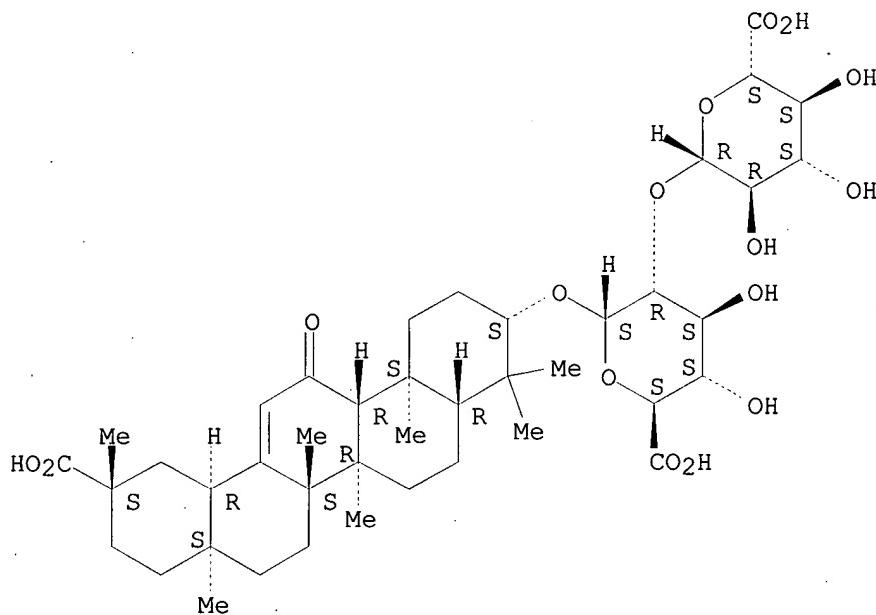
Absolute stereochemistry.



RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 95 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1986:10611 HCPLUS

DN 104:10611

TI Sustained-release, topical compositions containing polyoxyethylene castor oil ether and sorbitan esters as dispersion bases

IN Kojima, Nobuo; Yoshikawa, Masaru; Yanagibashi, Norio; Abe, Miyuki; Fukuda, Hidenori; Toda, Haruhiko

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K047-00

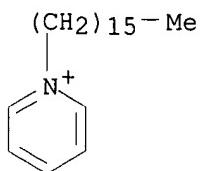
ICS A61K007-00; A61K009-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60149531	A2	19850807	JP 1984-5643	19840118 <--
	JP 04055165	B4	19920902		
PRAI	JP 1984-5643		19840118 <--		
AB	Sustained-release, topical compns. for skin or mucosa application consist of cationic surfactants and active ingredients with addn. of 100 parts polyoxyethylene castor oil ether and(or) polyoxyethylene hardened castor oil ether and 3-30 parts sorbitan polyesters as dispersing bases. Thus, a topical pharmaceutical was prep'd. contg. polyoxyethylene hardened castor oil 9, sorbitan trioleate [26266-58-0] 1, benzethonium chloride [121-54-0] 0.2, dibucaine-HCl [61-12-1] 0.1, naphazoline-HCl [550-99-2] 0.1, chlorpheniramine maleate [113-92-8] 0.2, allantoin [97-59-6] 0.1 and EtOH 10 g with addn. of H2O to 100 mL.				
ST	topical pharmaceutical ethoxylated castor oil; sorbitan polyester topical pharmaceutical				
IT	Castor oil				
	RL: BIOL (Biological study) (ethoxylated and hydrogenated ethoxylated, sustained-release topical pharmaceuticals contg.)				
IT	Mouthwashes				
	(ethoxylated castor oil and sorbitan esters for)				
IT	Rosemary				
	(ext., mouthwashes contg., dispersing bases in relation to)				
IT	Capsicum annuum				
	Aloe				
	RL: BIOL (Biological study) (ext., sustained-release topical pharmaceuticals contg.)				
IT	Quaternary ammonium compounds, biological studies				
	RL: BIOL (Biological study) (alkylbenzyldimethyl, chlorides, sustained-release topical pharmaceuticals contg.)				
IT	Surfactants				
	(cationic, pharmaceuticals contg., for sustained-release topical application)				
IT	Hair preparations				
	(tonics, ethoxylated castor oil and sorbitan esters for)				
IT	Pharmaceuticals				
	(topical, sustained-release, ethoxylated castor oil and sorbitan esters for)				
IT	26266-58-0				
	RL: BIOL (Biological study) (pharmaceuticals contg. ethoxylated castor oil and, for sustained-release topical application)				
IT	51-05-8 51-60-5 61-12-1 73-78-9 97-59-6 113-92-8 119-36-8 121-54-0 123-03-5 147-24-0 426-13-1 471-53-4 530-78-9 550-99-2 723-46-6 942-46-1 1115-84-0 1405-10-3 3847-29-8 8068-28-8 9066-59-5 16177-21-2 23593-75-1 68797-35-3				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceuticals contg., for sustained-release topical application)				
IT	123-03-5 471-53-4 68797-35-3				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceuticals contg., for sustained-release topical application)				
RN	123-03-5 HCPLUS				
CN	Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)				

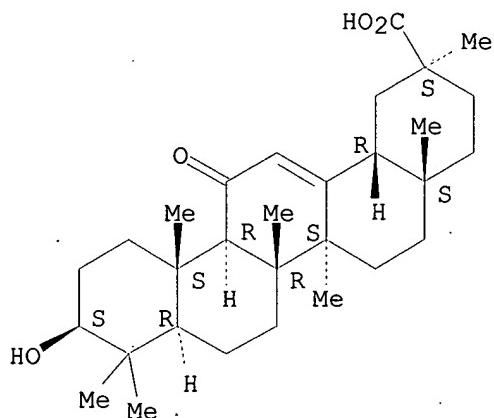


● Cl⁻

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

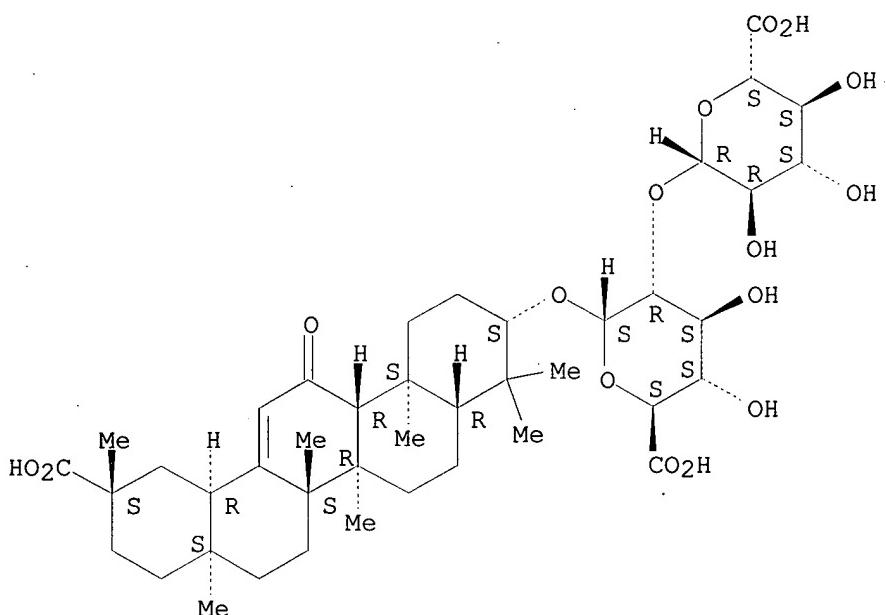


RN 68797-35-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

●2 K

L105 ANSWER 96 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1985:589776 HCPLUS

DN 103:189776

TI Effects of surfactants on the permeability of canine oral mucosa in vitro

AU Siegel, Ivens A.; Gordon, Herbert P.

CS Cent. Res. Oral Biol., Univ. Washington, Seattle, WA, 98195, USA

SO Toxicology Letters (1985), 26(2-3), 153-8

CODEN: TOLED5; ISSN: 0378-4274

DT Journal

LA English

CC 1-12 (Pharmacology)

Section cross-reference(s): 62, 63

AB The effect of 3 cationic, 1 anionic, and 1 nonionic surfactant on the permeability of oral frenulum removed from anesthetized dogs was detd. in vitro. Permeability to 12 org. compds. was measured in the presence and absence of surfactant. **Cetylpyridinium chloride** [123-03-5], cetyltrimethylammonium bromide [57-09-0], benzalkonium chloride and Na lauryl sulfate [151-21-3] at concns. from 0.025-1.0% caused dose-related increases in permeability to each of the solutes tested, whereas polysorbate 80 [9005-65-6] caused an increase in permeability to only 3 solutes, and this occurred only at the highest surfactant concn. employed.

ST surfactant mouth mucosa permeability; org compd mouth permeability
surfactant

IT Surfactants

(mouth mucosa permeability to org. compds. response to)

IT Organic compounds, biological studies

RL: BIOL (Biological study)

(mouth mucosa permeability to, surfactants effect on)
IT Quaternary ammonium compounds, biological studies
RL: BIOL (Biological study)
(alkylbenzyldimethyl, chlorides, mouth mucosa permeability to org.
compds. response to)

IT Mouth
(mucosa, org. compds. permeability to, surfactants effect on)

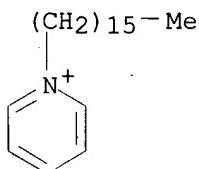
IT Biological transport
(permeation, of org. compds., in mouth mucosa, surfactants effect on)

IT 57-09-0 123-03-5 151-21-3, biological studies 9005-65-6
RL: BIOL (Biological study)
(mouth mucosa permeability to org. compds. response to)

IT 56-81-5, biological studies 57-13-6, biological studies 57-50-1
, biological studies 60-35-5, biological studies 69-65-8 71-23-8,
biological studies 107-21-1, biological studies 629-30-1
9004-54-0, biological studies **9005-80-5**
RL: BIOL (Biological study)
(mouth mucosa permeability to, surfactants effect on)

IT **123-03-5**
RL: BIOL (Biological study)
(mouth mucosa permeability to org. compds. response to)

RN 123-03-5 HCPLUS
CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)

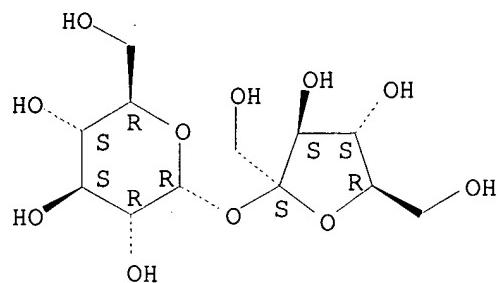


● Cl-

IT 57-50-1, biological studies 9004-54-0, biological
studies 9005-80-5
RL: BIOL (Biological study)
(mouth mucosa permeability to, surfactants effect on)

RN 57-50-1 HCPLUS
CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9004-54-0 HCPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-80-5 HCPLUS
 CN Inulin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 97 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1985:572028 HCPLUS
 DN 103:172028
 TI The effects of *Carthamus tinctorius L.*, .beta.-**glycyrrhetic acid**, carbazochrome, and chlorhexidine in inflamed **gingiva** induced by activating **plaque** accumulation in beagle dogs
 AU Nagahata, Tetsuji; Yamashita, Satoshi; Yamashita, Tomoko; Yamazaki, Kazuhisa; Sasaki, Shuji; Hara, Kohji
 CS Appl. Res. Lab., Lion Corp., Odawara, 256, Japan
 SO Shika Kiso Igakkai Zasshi (1985), 27(1), 299-305
 CODEN: SHKKAN; ISSN: 0385-0137
 DT Journal
 LA English
 CC 1-12 (Pharmacology)
 AB The effects of water exts. of *C. tinctorius* (E-C), .beta.-**glycyrrhetic acid** (Gly.) [1449-05-4], and carbazochrome (Carz.) [69-81-8], alone or in combination with and chlorhexidine (CHX) [55-56-1] on the inflamed **gingiva** induced by accelerated **plaque** accumulation were investigated in dogs. After a clin. healthy **gingiva** was obtained by means of scaling and tooth brushing for 4-6 wk, **gingival** inflammation was induced by the placement of silk floss ligatures around the premolars and molars and by feeding a soft diet for 1 wk. The drugs were topically applied with a silicon gum tray for 5 and 10 days after inducement of **gingivitis**. A redn. of the no. of infiltrated polymorphonutrophils in the connective tissues adjacent to the upper part of the sulcular epithelium was obsd. with all drugs applied to **gingiva** at 10 days after the application. These findings suggest that the antiinflammatory E-C, Gly., Carz., as well as CHX are effective in the treatment of **gingivitis** singly or in combination.
 ST **glycyrrhetic acid gingivitis**
plaque; carbazochrome gingivitis plaque;
chlorhexidine gingivitis plaque; Carthamus ext
gingivitis plaque; antiinflammatory drug
gingivitis plaque
 IT Safflower
 (ext. of, **gingivitis** induced by **plaque** response to)
 IT Inflammation inhibitors and Antiarthritics
 (nonsteroidal, **gingivitis** induced by **plaque** response to)
 IT **Gingiva**
 (disease, **gingivitis**, **plaque**-induced, *Carthamus tinctorius* ext. and other antiinflammatory drugs effect on)
 IT **Tooth**
 (**plaque, gingivitis** induced by, *Carthamus tinctorius* ext. and other antiinflammatory drugs effect on)
 IT 55-56-1 69-81-8 1449-05-4
 RL: BIOL (Biological study)
 (**gingivitis** induced by **plaque** response to)

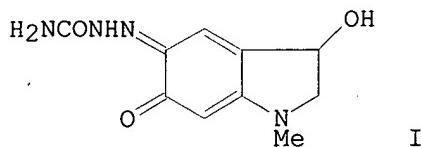
L105 ANSWER 98 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1985:225861 HCPLUS
 DN 102:225861
 TI **Dentifrices** containing carbazochromes for **gingival** inflammation and bleeding control
 PA Lion Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 IC ICM A61K007-26
 CC 62-7 (Essential Oils and Cosmetics)
 Section cross-reference(s): 1, 63

FAN.CNT 1

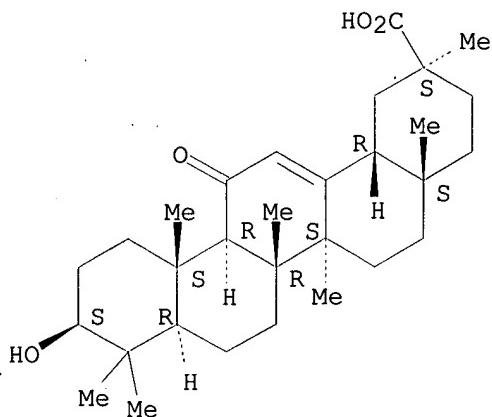
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59227812	A2	19841221	JP 1983-101464	19830607 <--
	JP 04017930	B4	19920326		
PRAI	JP 1983-101464		19830607 <--		

GI



- AB Dentifrices effective in controlling **gingivitis** and **gingival** bleeding contain carbazochrome (I) [69-81-8], its derivs. and one or more components selected from **glycyrrhetic acid**, its salts, and coca exts. Thus, a **mouthwash** comprises 95% glycerin 20, 60% sorbitol 20, Carbopol 0.001, polyoxyethylene sorbitan monolaurate 1.0, polyoxyethylene stearate 1.0, Na saccharin 0.1, flavoring 1.0, tranexamic acid [1197-18-8] 0.05, coca MeOH ext. 0.05, carbazochrome 0.1, and H₂O to 100% by wt.
- ST dentifrice carbazochrome **gingivitis**; coca ext
 carbazochrome dentifrice; **glycyrrhizinate**
 carbazochrome dentifrice
- IT Chewing gum
Dentifrices
Mouthwashes
 (carbazochromes and **glycyrrhizinate** of, for
gingivitis control)
- IT Coca
 (exts., **dentifrices** contg. carbazochromes and, for
gingivitis control)
- IT Gingiva
 (disease, **gingivitis**, carbazochromes and
glycyrrhizinates of **dentifrices** in prevention of)
- IT 471-53-4 53956-04-0 68797-35-3
 RL: BIOL (Biological study)
 (**dentifrices** contg. carbazochromes and, for
gingivitis control)
- IT 69-81-8 1197-18-8 3697-42-5 9025-70-1 10163-15-2 18472-51-0
 RL: BIOL (Biological study)
 (**dentifrices** contg. **glycyrrhizinate** and, for
gingivitis control)
- IT 471-53-4 53956-04-0 68797-35-3
 RL: BIOL (Biological study)
 (**dentifrices** contg. carbazochromes and, for
gingivitis control)
- RN 471-53-4 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β ., 20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

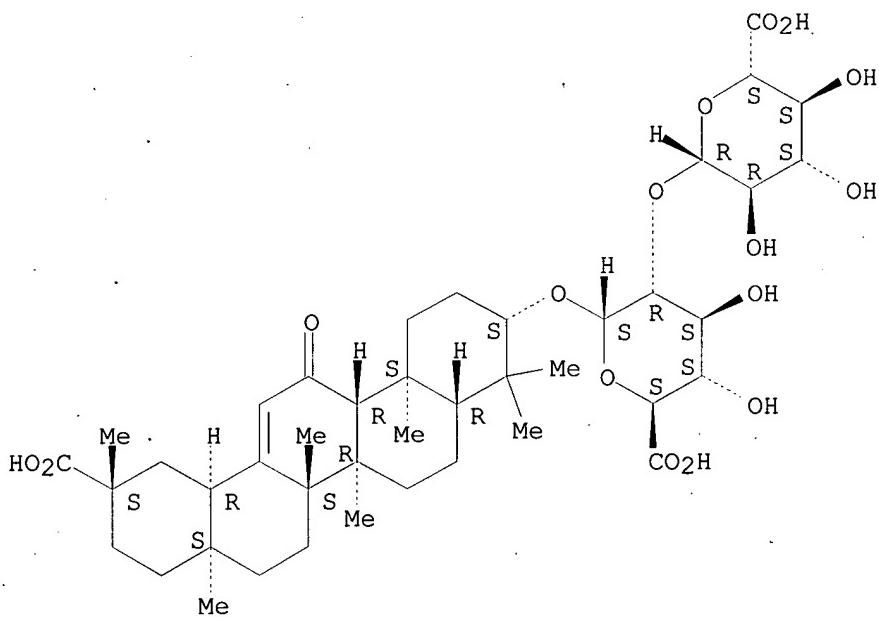


RN 53956-04-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

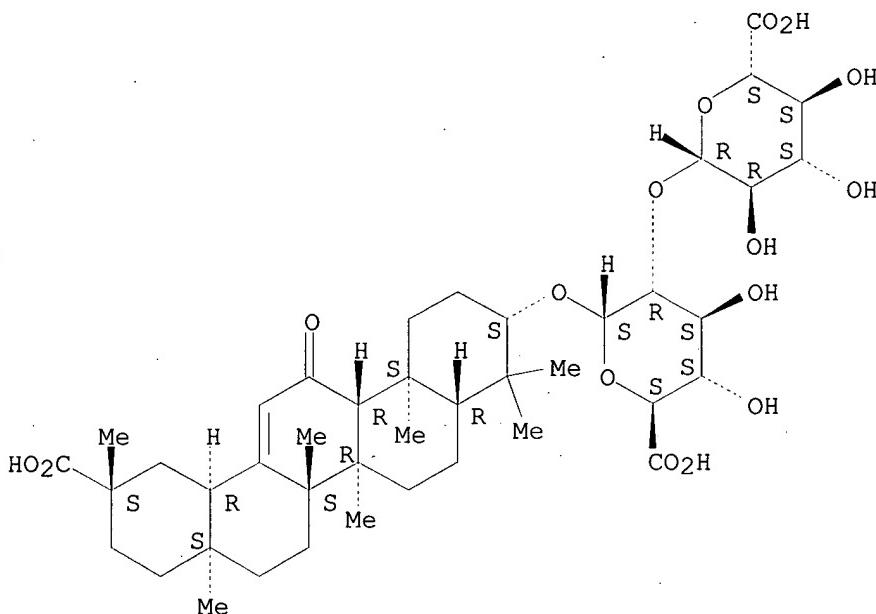
NH₃

RN 68797-35-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

● 2 K

L105 ANSWER 99 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1985:201821 HCPLUS

DN 102:201821

TI Surfactant-induced increases of permeability of rat oral mucosa to non-electrolytes *in vivo*

AU Siegel, I. A.; Gordon, H. P.

CS Cent. Res. Oral Biol., Univ. Washington, Seattle, WA, 98105, USA

SO Archives of Oral Biology (1985), 30(1), 43-7

CODEN: AOBIA; ISSN: 0003-9969

DT Journal

LA English

CC 13-6 (Mammalian Biochemistry)

AB The effect of nonionic, cationic, and anionic surfactants on nonelectrolyte permeability of rat oral mucosa *in vivo* was tested. The surfactants caused an increase in mucosal permeability to oil-sol. compds. and small and large water-sol. compds. The effect was concn. dependent, and both the cationic and anionic surfactants were more potent than the nonionic compds. Surfactant-treated tissue showed widening of the stratum corneum due to sepn. of layers and loss of surface layers. Measurement of the permeability to Na lauryl sulfate indicated that this anionic surfactant produced damage to the permeability barrier.

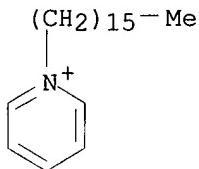
ST oral mucosa permeability surfactant; tongue mucosa permeability surfactant
IT Solvation

(of nonelectrolyte, in tongue mucosa cell membrane, permeation by, surfactant effects in relation to)

IT Nonelectrolytes

(tongue mucosa permeability to, surfactants effect on)

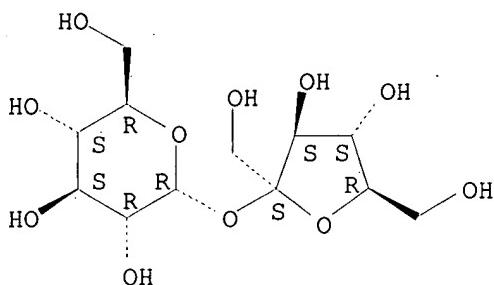
IT Surfactants
 (anionic, nonelectrolyte permeability in tongue mucosa response to)
 IT Surfactants
 (cationic, nonelectrolyte permeability in tongue mucosa response to)
 IT Biological transport
 (channel-mediated, of nonelectrolytes, in oral mucosa, surfactants effect on)
 IT Mouth
 Tongue
 (mucosa, nonelectrolyte permeability of, surfactants effect on)
 IT Surfactants
 (nonionic, nonelectrolyte permeability in tongue mucosa response to)
 IT Biological transport
 (permeation, of nonelectrolytes, in tongue mucosa, surfactants effect on)
 IT 123-03-5 9005-65-6
 RL: BIOL (Biological study)
 (Nonelectrolyte permeability in tongue mucosa response to)
 IT 151-21-3, biological studies
 RL: BIOL (Biological study)
 (Nonelectrolyte permeability in tongue mucosa response to, damage to permeability barrier in relation to)
 IT 50-99-7, biological studies 56-81-5, biological studies 57-13-6,
 biological studies 57-50-1, biological studies 71-36-3,
 biological studies 107-92-6, biological studies 9005-80-5
 RL: BIOL (Biological study)
 (tongue mucosa permeability to, surfactants effect on)
 IT 123-03-5
 RL: BIOL (Biological study)
 (Nonelectrolyte permeability in tongue mucosa response to)
 RN 123-03-5 HCPLUS
 CN Pyridinium, 1-hexadecyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl-

IT 57-50-1, biological studies 9005-80-5
 RL: BIOL (Biological study)
 (tongue mucosa permeability to, surfactants effect on)
 RN 57-50-1 HCPLUS
 CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9005-80-5 HCPLUS
 CN Inulin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 100 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1985:109673 HCPLUS

DN 102:109673

TI Anticariogenic activity of licorice and glycyrrhizine. I: Inhibition of in vitro plaque formation by *Streptococcus mutans*

AU Segal, R.; Pisanty, S.; Wormser, R.; Azaz, E.; Sela, M. N.

CS Sch. Pharm., Heb. Univ., Jerusalem, Israel

SO Journal of Pharmaceutical Sciences (1985), 74(1), 79-81

CODEN: JPMSAE; ISSN: 0022-3549

DT Journal

LA English

CC 10-5 (Microbial Biochemistry)

AB The effect of licorice and its active sweet component glycyrrhizin was tested on the growth and adherence to glass of cariogenic *S. mutans*. Neither licorice nor glycyrrhizin promoted growth or induced plaque formation. In the presence of sucrose, glycyrrhizin did not affect bacterial growth, but the adherence (plaque formation) was markedly inhibited. At 0.5-1% glycyrrhizin, inhibition was almost complete. The suggestion that glycyrrhizin may serve as an efficient vehicle for topical oral medications is thus supported.

ST *Streptococcus* plaque formation licorice
 glycyrrhizine; anticariogenicity licorice
 glycyrrhizine

IT Licorice

RL: BIOL (Biological study)
 (plaque formation by *Streptococcus mutans*
 inhibition by)

IT *Streptococcus mutans*
 (plaque formation by, licorice and
 glycyrrhizin inhibition of)

IT Tooth
 (plaque, formation of, by *Streptococcus*
mutans, glycyrrhizine and licorice
 inhibition of)

IT 57-50-1, biological studies
 RL: BIOL (Biological study)
 (plaque formation by *Streptococcus mutans*
 inhibition by glycyrrhizin enhancement by)

IT 1405-86-3
 RL: BIOL (Biological study)
 (plaque formation by *Streptococcus mutans*
 inhibition by, sucrose enhancement of)

IT 57-50-1, biological studies

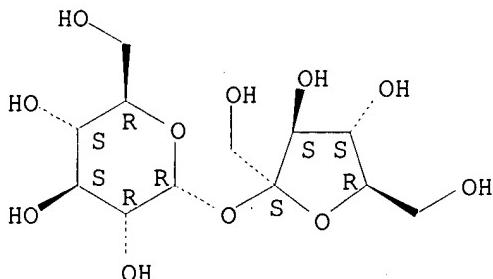
RL: BIOL (Biological study)

(plaque formation by *Streptococcus mutans*
inhibition by *glycyrrhizin* enhancement by)

RN 57-50-1 HCPLUS

CN .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 1405-86-3

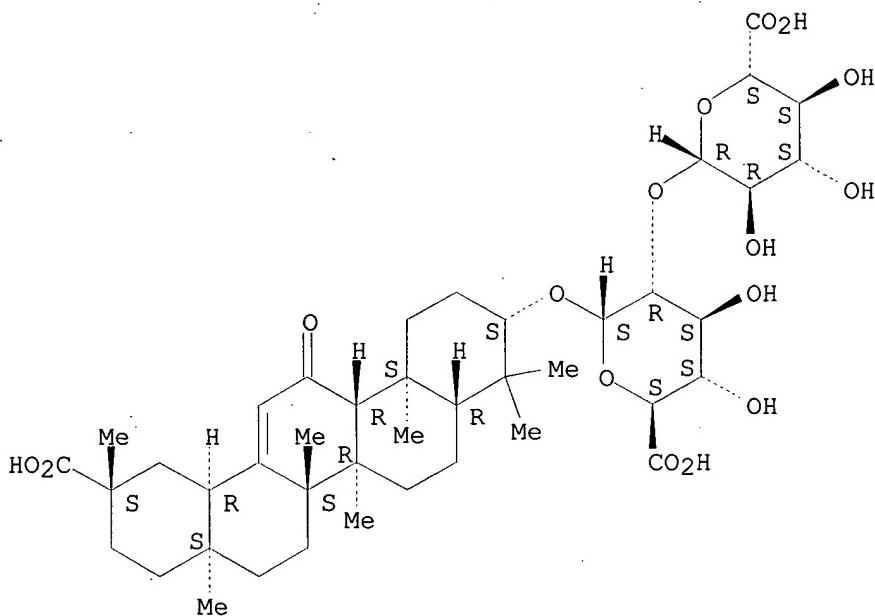
RL: BIOL (Biological study)

(plaque formation by *Streptococcus mutans*
inhibition by, sucrose enhancement of)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.β.,20.β.)-20-carboxy-11-oxo-
30-norolean-12-en-3-yl 2-O-.β.-D-glucopyranuronosyl- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



L105 ANSWER 101 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1984:91403 HCPLUS

DN 100:91403

TI Bases containing pectin for pharmaceuticals for oral disease treatment

PA Taisho Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 2 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC A61K047-00

ICA A61K006-00

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58206534	A2	19831201	JP 1982-89419	19820526 <--
	JP 02059804	B4	19901213		

PRAI JP 1982-89419 19820526 <--

AB Pharmaceuticals for oral disease treatment consist of bases contg. 5-60% pectin [9000-69-5] with particle size of >150 mesh. Pectin enables the prepn. to be retained in the diseased part for a prolonged time. Thus, a base contg. white petroleum 56.3, plastic base 13, pectin (200 mesh) 20 and poly(vinyl alc.) 10 g was mixed with 0.2 g Lithospermum roots exts., 0.2 g chlorhexidine-HCl, 0.3 g **glycyrrhetic acid** and flavors to produce a prepn. for oral disease treatment.

ST pectin oral drug base; ointment oral pectin

IT Ointments

(bases for, pectin in, for oral disease treatment)

IT Mouth

Tooth

(disease, treatment of, ointment bases contg. pectin for)

IT 9000-69-5

RL: BIOL (Biological study)

(ointment bases contg., for oral disease treatment)

IT 9000-69-5

RL: BIOL (Biological study)

(ointment bases contg., for oral disease treatment)

RN 9000-69-5 HCPLUS

CN Pectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 102 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1983:166771 HCPLUS

DN 98:166771

TI **Dentifrice** composition

IN Bandzauner, Arnold; Forsthoff, Ernst Ludwig; Ernerth, Martin

PA Unilever N. V., Neth.; Unilever PLC

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

IC A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

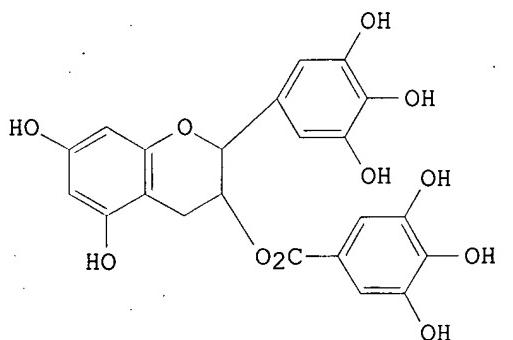
Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 67476	A2	19821222	EP 1982-200673	19820602 <--
	EP 67476	A3	19831214		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	DE 3123211	A1	19830105	DE 1981-3123211	19810611 <--

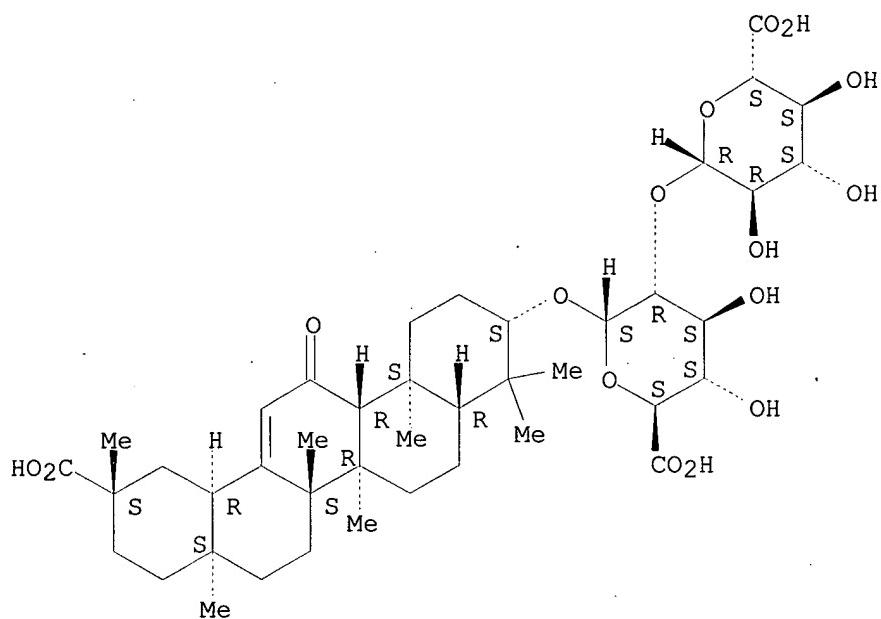
PRAI DE 1981-3123211 19810611 <--

GI



- AB **Dentifrices** promoting keratinization of the oral mucosa and reducing **gingivitis**, contain epigallocatechin 3-gallate (I) [989-51-5] and (or) a **glycyrrhizinate** polyvalent metal salt at 0.1-10% by wt. Thus, test panelists who brushed their **teeth** twice daily for 7 days with a **toothpaste** contg. **Zn glycyrrhizinate** [85441-51-6] and those who used a com. **toothpaste** followed by rinsing with an aq. soln. contg. 0.75% I had a keratinization index on the 7th day of 84 and 85, resp., compared with a value of 5 for those who used the com. **dentifrice** alone.
- ST epigallocatechin gallate **dentifrice**; **zinc glycyrrhizinate dentifrice**; **dentifrice**
keratinization mucosa; **gingivitis dentifrice**
- IT **Dentifrices**
(epigallocatechin gallate or **zinc glycyrrhizinate**
of, for oral mucosa keratinization promotion in **gingivitis**
treatment)
- IT Keratins
RL: FORM (Formation, nonpreparative)
(formation of, by oral mucosa epithelium, epigallocatechin gallate and **zinc glycyrrhizinate** increase of)
- IT **Gingiva**
(disease, **gingivitis**, treatment of, with epigallocatechin gallate and **zinc glycyrrhizinate**, keratinization promotion in relation to)
- IT 989-51-5 **1405-86-3D**, polyvalent metal salts **85441-51-6**
RL: BIOL (Biological study)
(**dentifrices** contg., for oral mucosa keratinization promotion, in **gingivitis** treatment)
- IT **1405-86-3D**, polyvalent metal salts **85441-51-6**
RL: BIOL (Biological study)
(**dentifrices** contg., for oral mucosa keratinization promotion, in **gingivitis** treatment)
- RN **1405-86-3 HCPLUS**
- CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-. β .-D-glucopyranuronosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

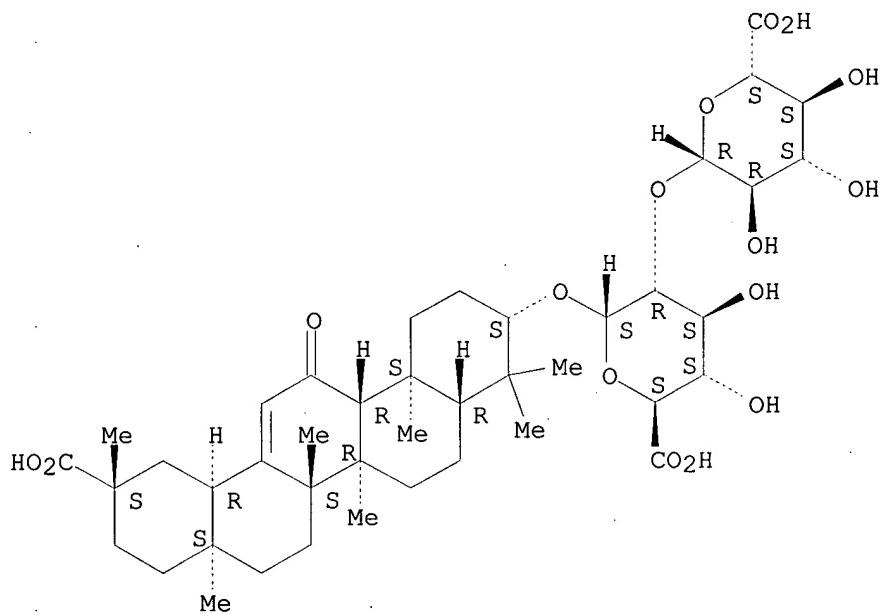


RN 85441-51-6 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.β.,20.β.)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-.β.-D-glucopyranuronosyl-, zinc salt (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

●x Zn

L105 ANSWER 103 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1982:57584 HCPLUS
 DN 96:57584
 TI Emulsification and stabilization of anise and anethole essences and essential oils or fats in aqueous media
 IN Voisin, Max
 PA Fr.
 SO Belg., 12 pp.
 CODEN: BEXXAL
 DT Patent
 LA French
 IC ICS C11
 ICI A23
 CC 62-2 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 888912	A1	19810916	BE 1981-204869	19810521 <--
	FR 2483455	A1	19811204	FR 1981-10062	19810520 <--
	FR 2483455	B1	19840831		
	NL 8102549	A	19811216	NL 1981-2549	19810525 <--
	US 4411813	A	19831025	US 1981-268023	19810528 <--
	SE 8103388	A	19811201	SE 1981-3388	19810529 <--
	DE 3121479	A1	19820415	DE 1981-3121479	19810529 <--

PRAI LU 1980-82495 19800530 <--

AB Stable aq. emulsions of essential oils are prep'd. by mixing the essential oil with plant gums, emulsifiers, e.g. lecithins, and antigels. Thus, a mixt. of anethole 200, licorice ext. 100, gum arabic [9000-01-5] 500, and lecithins 20 g in 99L H₂O and 1 L deodorized limonene was stirred for 10 min at 1500 rpm and subjected to ultrasonic action for 20 min to form a stable emulsion.

ST emulsion oil essential stabilization

IT Gums and Mucilages

Lecithins

RL: BIOL (Biological study)

(essential oil emulsions stabilization with)

IT Emulsions

(of essential oils, stabilization of)

IT Cosmetics

(emulsions, of essential oils, stabilization of)

IT 57-55-6D, monoesters 9000-01-5 9000-07-1 9000-40-2

9000-65-1 9002-18-0 9005-32-7D, compds.

11099-07-3 25637-85-8 26657-95-4

RL: BIOL (Biological study)

(essential oil emulsions stabilization with)

IT 9000-07-1 9000-40-2 9000-65-1

9002-18-0 9005-32-7D, compds.

RL: BIOL (Biological study)

(essential oil emulsions stabilization with)

RN 9000-07-1 HCPLUS

CN Carrageenan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9000-40-2 HCPLUS

CN Carob gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9000-65-1 HCPLUS
 CN Gum tragacanth (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-18-0 HCPLUS
 CN Agar (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-32-7 HCPLUS
 CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 104 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1981:36132 HCPLUS

DN 94:36132

TI Salts of glycyrrhizinic acid

IN Dedieu, Robert; Humbert, Françoise

PA Unilever Ltd., UK

SO Brit., 11 pp.

CODEN: BRXXAA

DT Patent

LA English

IC C07J063-00; A61K031-70

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 33

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1567307	A	19800514	GB 1975-49654	19751203 <--
PRAI	GB 1975-50409		19751209 <--		
GI	For diagram(s), see printed CA Issue.				
AB	The title salts I (R, R ₁ , R ₂ = H, NH ₄ , or quaternary ammonium; R = R ₁ = R ₂ .noteq. H, NH ₄) are sweet-tasting oral bactericides having low toxicity and irritation, and may be incorporated in toothpastes and mouthwashes. The salts are prep'd. by treating ammonium glycyrrhizinate (II) [53956-04-0] with the appropriate quaternary ammonium hydroxide to give a degree of substitution of 1.5-2.5. E.g., 50 g II suspended in 100 mL EtOH was treated with 185 mL 0.644N alc. tetradecytrimethylammonium hydroxide until complete dissoln. occurred. The solvent was evapd. to give 72 g tetradecyltrimethylammonium glycyrrhizinate (III). The min. inhibitory concn. of III against Streptococcus Ingibritt (Jordan's medium) was 0.0006% compared with <0.0003% for RN+Me ₃ Br ⁻ (R = tetradecyl). The cutaneous irritation factor of II vs. vitamin C was 0.75 whereas that of RN+Me ₃ Br ⁻ (R = tetradecyl) was 1.16.				
ST	dentifrice bactericide glycyrrhizinate salt; mouthwash bactericide glycyrrhizinate salt; quaternary ammonium glycyrrhizinate; alkylammonium glycyrrhizinate bactericide				
IT	Dentifrices Mouthwashes (bactericides for, glycyrrhizinic acid quaternary ammonium salts as)				
IT	Triterpenes and Triterpenoids RL: PREP (Preparation) (glycosides, glycyrrhizinic acid salts, prepn. of, as bactericides for dentifrices and mouthwashes)				
IT	Bactericides, Disinfectants and Antiseptics (glycyrrhizinic acid quaternary ammonium salts, for dentifrices and mouthwashes)				
IT	Carbohydrates, compounds				

RL: PREP (Preparation)
 (glycyrrhizinic acid salts, prepn. of, as
 bactericides for dentifrices and mouthwashes)

IT Quaternary ammonium compounds, biological studies
 RL: BIOL (Biological study)
 (salts, glycyrrhizinate, bactericides, for
 dentifrices and mouthwashes)

IT 76138-67-5 76158-33-3
 RL: BIOL (Biological study)
 (bactericide for dentifrices and mouthwashes)

IT 53956-04-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ion-exchange reaction of, with quaternary ammonium hydroxides)

IT 1405-86-3DP, quaternary ammonium salts 10182-92-0DP,
 glycyrrhizinate salts 15416-75-8DP, glycyrrhizinate
 salts 50854-45-0DP, glycyrrhizinate salts 76138-64-2P
 RL: PREP (Preparation)
 (prepn. of, as bactericide for dentifrices and
 mouthwashes)

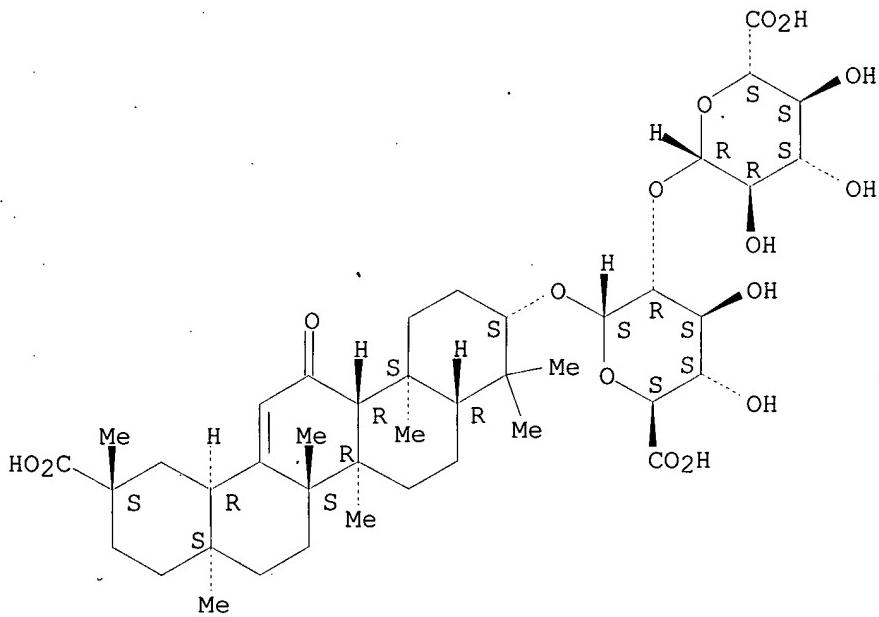
IT 53956-04-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ion-exchange reaction of, with quaternary ammonium hydroxides)

RN 53956-04-0 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

NH₃

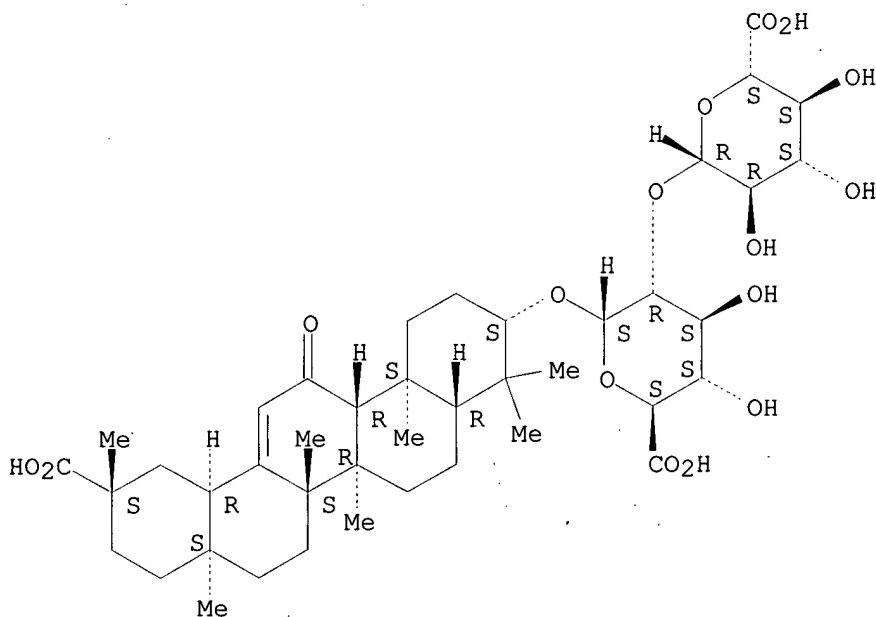
IT 1405-86-3DP, quaternary ammonium salts

RL: PREP (Preparation)
 (prepn. of, as bactericide for dentifrices and
 mouthwashes)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



L105 ANSWER 105 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1979:409357 HCPLUS

DN 91:9357

TI Saccharin-free dentifrices

IN Sato, Hiroshi; Iioka, Isao; Suganuma, Nobuo; Yoshida, Fumio; Gomi, Tetsuo;
 Anzai, Masabumi

PA Lion Dentifrice Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC A61K007-16

CC 62-7 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54026339	A2	19790227	JP 1977-90800	19770728 <--
	JP 62015522	B4	19870408		

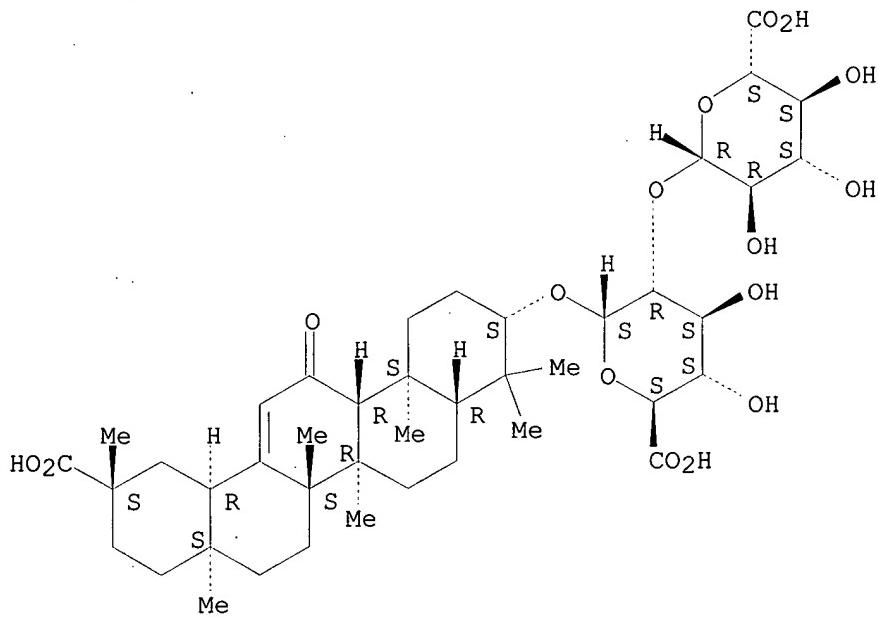
PRAI JP 1977-90800 19770728 <--

AB Saccharin-free compns. for oral application contain anethole (I) [104-46-1] and glycyrrhizic acid [1405-86-3] or their salts as sweeteners. Thus, a toothpaste contained anhyd. silicic acid 30, glycerol 50, Na lauryl sulfate 1, sucrose dilauryl ester 1, carrageenan 1, di-K glycyrrhizate [68797-35-3] 0.2, flavors 1, and water to 100%. The flavors consisted of menthol 30, peppermint oil 20, I 20, cinnamaldehyde 15, Me salicylate 5, orange oil 7 and eucalyptus oil 3 parts.

ST dentifrice saccharin free; anethole dentifrice;

glycyrrhizate dentifrice; sweetener dentifrice
 IT Sweetening agents
 (for dentifrices, anethole and glycyrrhizates as)
 IT Dentifrices
 (sweeteners for, anethole and glycyrrhizates as)
 IT 104-46-1 1405-86-3 53956-04-0 68797-35-3
 RL: BIOL (Biological study)
 (as sweetener, for dentifrices)
 IT 1405-86-3 53956-04-0 68797-35-3
 RL: BIOL (Biological study)
 (as sweetener, for dentifrices)
 RN 1405-86-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

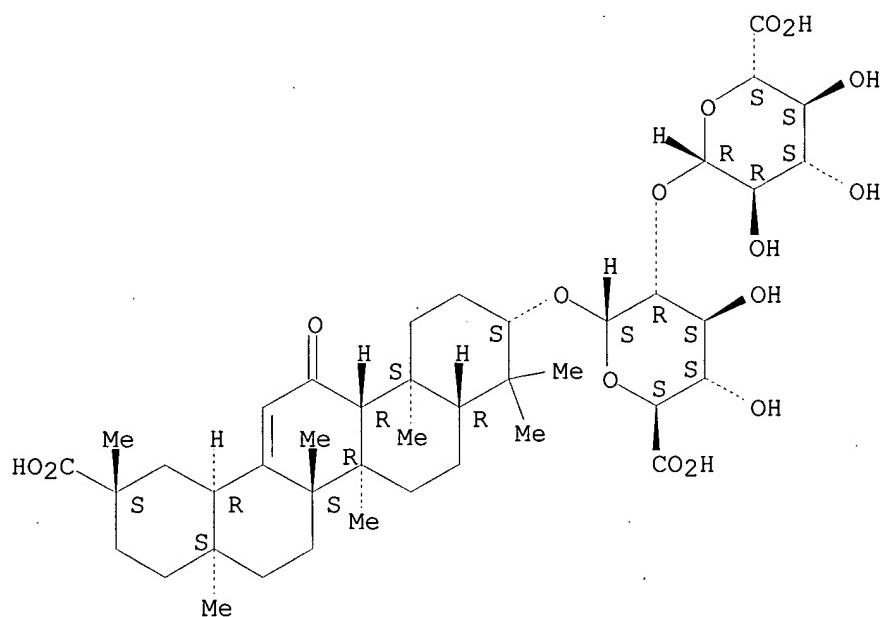
Absolute stereochemistry.



RN 53956-04-0 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl-, monoammonium salt
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



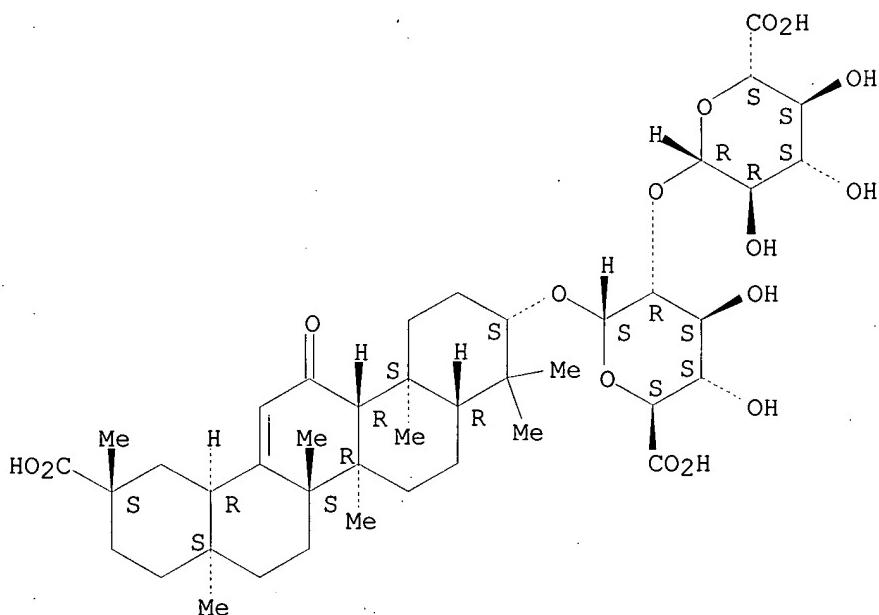
PAGE 2-A

● NH₃

RN 68797-35-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-30-norolean-12-en-3-yl 2-O-. β .-D-glucopyranuronosyl-, dipotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

●2 K

L105 ANSWER 106 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1978:563800 HCPLUS

DN 89:163800

TI Stearyl glycyrrhetinate

IN Uenishi, Hideaki; Ise, Ryoichi; Tamao, Masato; Kobayashi, Akio

PA Sanyo-Kokusaku Pulp Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC C07C069-74

CC 30-30 (Terpenoids)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53063368	A2	19780606	JP 1976-138491	19761119
	JP 55034137	B4	19800904		

PRAI JP 1976-138491 19761119

AB Antiinflammatory (no data), oil-sol. title ester was prep'd. by heating K or Na glycyrrhetinate with stearyl bromide in EtOH or dioxane contg. Et₃N. Thus, refluxing 100 g **glycyrrhetic acid** (99.4% pure) in abs. EtOH contg. 11.9 g KOH with 91.5 g stearyl bromide and 1.7 g Et₃N with removal of EtOH, and heating at 100-10.degree. 4 h gave 123 g stearyl glycyrrhetinate.

ST antiinflammatory stearyl glycyrrhetinate

IT Inflammation inhibitors
(stearyl glycyrrhetinate)

IT 13832-70-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT 112-89-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with **glycyrrhetic acid**)

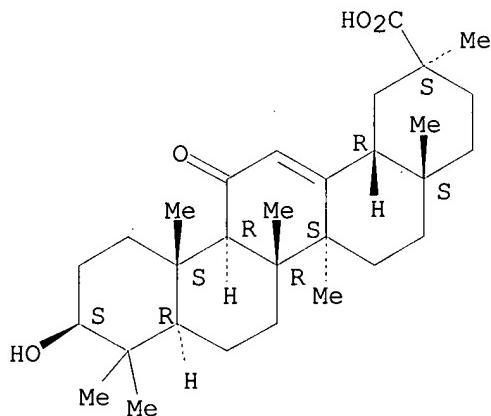
IT 471-53-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with stearyl bromide)

IT 471-53-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with stearyl bromide)

RN 471-53-4 HCPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L105 ANSWER 107 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1978:541063 HCPLUS

DN 89:141063

TI Reduction in enamel dissolution by **licorice** and
glycyrrhizinic acid

AU Edgar, W. M.

CS Dep. Oral Physiol., Dent. Sch. Newcastle upon Tyne, Newcastle upon Tyne,
 UK

SO Journal of Dental Research (1978), 57(1), 59-64
 CODEN: JDREAF; ISSN: 0022-0345

DT Journal

LA English

CC 3-1 (Biochemical Interactions)

AB **Licorice** exts. and confections decreased enamel dissoln. in
 acidic buffers and saliva/glucose incubations by a direct effect on soly.
 and by inhibiting the fall in pH on incubation. These actions may be
 attributed to the soly.-reducing glycolysis-inhibiting, and buffering
 properties of **glycyrrhizinic acid** [1405-86-3]
], a constituent of licorice.

ST tooth enamel dissoln licorice; **glycyrrhizinate**
 tooth enamel dissoln

IT Tooth
 (enamel, dissoln. of, **licorice** inhibition of)

IT Liquids
 (**Glycyrrhiza glabra**, ext. of roots of,
 tooth enamel disoln. inhibition by)

IT 50-99-7, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (metab. of, by salivary bacteria, **glycyrrhizinic acid**
 effect on)

IT 1405-86-3

RL: PRP (Properties)
 (tooth enamel dissoln. inhibition by)

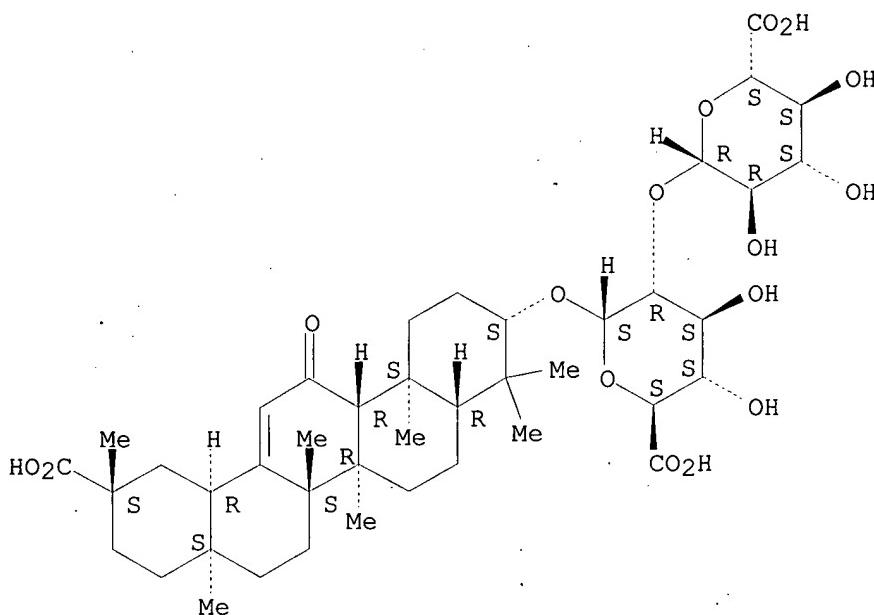
IT 1405-86-3

RL: PRP (Properties)
 (tooth enamel dissoln. inhibition by)

RN 1405-86-3 HCPLUS

CN .alpha.-D-Glucopyranosiduronic acid, (3.beta.,20.beta.)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



L105 ANSWER 108 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1978:101498 HCPLUS

DN 88:101498

TI Acid production from a nonsugar **licorice** and different sugar substitutes in **Streptococcus mutans** monoculture and pooled **plaque**-saliva mixtures

AU Toors, F. A.; Herczog, J. I. B.

CS Dep. Prev. Dent., Free Univ., Amsterdam, Neth.

SO Caries Research (1978), 12(1), 60-8

CODEN: CAREBK; ISSN: 0008-6568

DT Journal

LA English

CC 10-13 (Microbial Biochemistry)

AB Acid prodn. from an exptl., nonsugar **licorice**, its sep. constituents, and some other foods was measured in bacterial suspensions. A strain of **S. mutans** and a fresh, pooled **plaque**-saliva mixt. were used to test the fermentability of the substrates. The exptl. **licorice** proved to be relatively well fermentable by both **S. mutans** and the **plaque**-saliva mixt. Of its ingredients, the **polysaccharides** were most acidogenic, whereas gum arabic, xylitol, and a protein deriv. produced

very little acid. Sorbitol showed a slight acid prodn. in the plaque-saliva medium. In this medium, hydrogenated potato starch exhibited a relatively high degradability. *S. mutans* precultured on sorbitol and hydrogenated potato starch showed a considerably reduced capacity to ferment glucose. Telemetry of interdental plaque pH showed a crit. drop after consumption of the exptl. licorice, i.e., to pH 5.

ST licorice *Streptococcus* acid prodn

IT Licorice

Polysaccharides, biological studies

RL: PRP (Properties)

(degrdn. of, by *Streptococcus mutans*, acid formation in relation to)

IT Acids, biological studies

RL: FORM (Formation, nonpreparative)

(formation of, from licorice, by *Streptococcus mutans*)

IT *Streptococcus mutans*

(licorice degrdn. by, acid formation in relation to)

IT Tooth

(plaque, licorice degrdn. by, acid formation in relation to)

IT 50-70-4, biological studies 56-81-5, biological studies 87-99-0

9000-01-5 9005-25-8, biological studies

RL: PRP (Properties)

(degrdn. of, by *Streptococcus mutans*, acid formation in relation to)

IT 9005-25-8, biological studies

RL: PRP (Properties)

(degrdn. of, by *Streptococcus mutans*, acid formation in relation to)

RN 9005-25-8 HCPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L105 ANSWER 109 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1975:536887 HCPLUS

DN 83:136887

TI Glycyrrhetic acid cosmetics and ointments

IN Anmo, Toshio; Urushizaki, Fumio; Kawamata, Ichiro; Tanabe, Kayoko

PA Taisho Pharmaceutical Co., Ltd.

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

NCL 30C41; 30C45

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 1

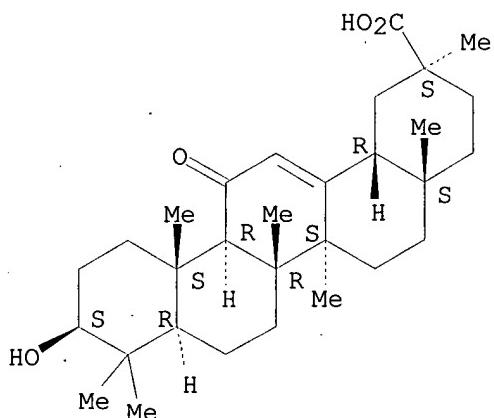
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 49047520	A2	19740508	JP 1972-91391	19720912
PRAI	JP 1972-91391		19720912		

AB Water-insol. and barely oil-sol.

glycyrrhetic acid (I) was compounded into ointments, and cosmetics by adding glycols and nonionic surfactants such as poly(oxyethylene) nonylphenyl ether (II), poly(oxyethylene) stearate, poly(oxyethylene) sorbitan monostearate (III), and sorbitan monostearate (IV). Thus, an ointment was prep'd. from a mixt. contg. I, II, propylene glycol, cetyl alc., liq. paraffin, III, IV, and water. No I crystals formed in the ointment 3 months after storage at 4.degree., room temp., and 40.degree..

ST glycyrrhetinate ointment cosmetic
 IT 471-53-4
 RL: BIOL (Biological study)
 (cosmetics and ointments contg.)
 IT 471-53-4
 RL: BIOL (Biological study)
 (cosmetics and ointments contg.)
 RN 471-53-4 HCPLUS
 CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, (3. β .,20. β .)- (9CI) (CA INDEX NAME)

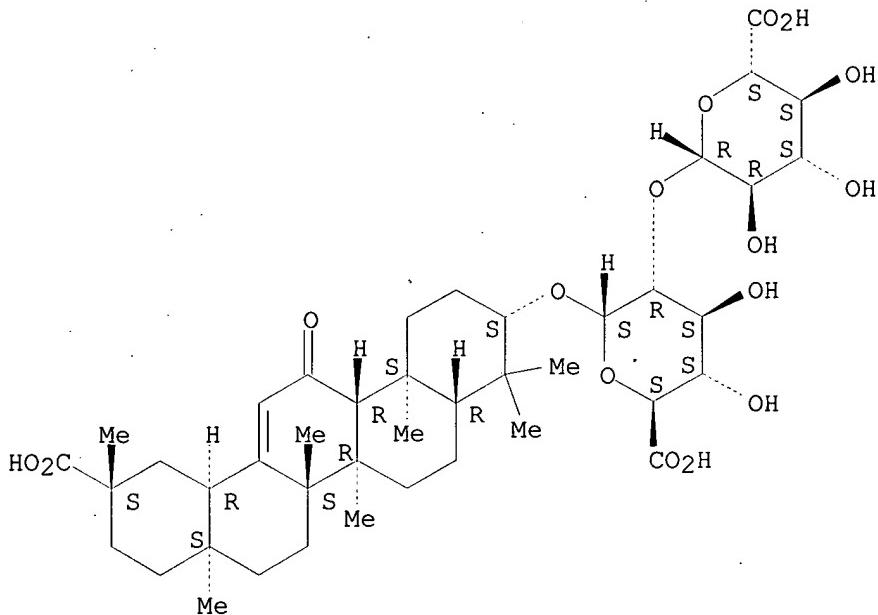
Absolute stereochemistry.



L105 ANSWER 110 OF 114 HCPLUS COPYRIGHT 2003 ACS
 AN 1973:470251 HCPLUS
 DN 79:70251
 TI Determination of **glycyrrhizinic acid** in crude
 licorice, licorice products, and medical preparations
 AU Vondenhof, Th.; Glombitzka, K. W.; Steiner, M.
 CS Pharmakognostischen Inst., Univ. Bonn, Bonn, Fed. Rep. Ger.
 SO Scientia Pharmaceutica (1973), 41(2), 155-61
 CODEN: SCPHA4; ISSN: 0036-8709
 DT Journal
 LA German
 CC 64-2 (Pharmaceutical Analysis)
 AB **Glycyrrhizinic acid** (I) was detd. based on its
 hydrolysis in aq. dioxane, CHCl₃ extn. of the **glycyrrhetic acid**
 formed, esterification with CH₂N₂, and gas chromatog. Using
 this recommended method, no I was detected in the following plants which
 had been claimed to contain it: Juglans regia, Gleditschia triacanthos,
 Polypodium vulgare, Astragalus glycyphyllos, and Myrrhis **odorata**
 ST **glycyrrhizinate** detn licorice
 IT Licorice
 RL: ANST (Analytical study)
 (**glycyrrhizinic acid** detn. in)
 IT 1405-86-3
 RL: ANT (Analyte); ANST (Analytical study)
 (detn. of, in **licorice** and pharmaceutical preps.)
 IT 1405-86-3
 RL: ANT (Analyte); ANST (Analytical study)
 (detn. of, in **licorice** and pharmaceutical preps.)
 RN 1405-86-3 HCPLUS
 CN .alpha.-D-Glucopyranosiduronic acid, (3. β .,20. β .)-20-carboxy-11-oxo-
 30-norolean-12-en-3-yl 2-O-.beta.-D-glucopyranuronosyl- (9CI) (CA INDEX)

NAME)

Absolute stereochemistry.



L105 ANSWER 111 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1972:158370 HCAPLUS

DN 76:158370

TI Treating buccodental disorders with β -glycyrrhetic acid compositions

IN Veyron, Leonce J.; Giustiniani, Ginette

SO Fr. CAM, 3 pp. Addn. to Fr. M1,306.

CODEN: FMXXBK

DT Patent

LA French

IC A61K; C07C

CC 63 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 222		19680801	FR 1967-120651	19670912 <--

AB Buccodental inflammatory disorders are treated with **dentifrices**, pellets, effervescent tablets, or elixirs having β -glycyrrhetic acid (I) as active agent. E.g., a tablet contains I 0.005, sucrose 0.150, starch 0.010, talc 0.005, Mg stearate 0.002 and 0.020 g lemon flavor.

ST glycyrrheticate buccodental compn; **dental compn**
glycyrrheticate

IT Mouth
(disorders of, **glycyrrhetic acid** for treatment of)

IT **Gingiva**
(inflammation of, **glycyrrhetic acid** for treatment of)

IT 1449-05-4
RL: BIOL (Biological study)
(pharmaceutical, for buccodental disorders treatment)

L105 ANSWER 112 OF 114 HCAPLUS COPYRIGHT 2003 ACS

AN 1965:445477 HCAPLUS
 DN 63:45477
 OREF 63:8135g-h
 TI Glycyrrhetic acid derivative
 PA Laboratorios Ferrer, S.L.
 SO 10 pp.
 DT Patent
 LA Unavailable
 CC 30 (Pharmaceuticals)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI ES 296176 19640407 ES 19640206

AB The Al salt (I) of the title compd. was used to treat stomach ulcers, without measurable toxicity. I (470.7 g.) in 6 l. EtOH was converted to the sol. Na salt by reaction with an aq. soln. of 40.0 g. NaOH for 1 hr. at 40.degree.. Then 171 g. alum in H₂O was added at 20.degree., followed by heating at 40-60.degree. for 2 hrs. The EtOH was evapd., and I was washed with H₂O and dried. I, mol. wt. 1436.05, was insol. in H₂O and alk. solns., sol. in MeOH, EtOH, and Me₂CO, and hydrolyzed by aq. acids. For oral administration, 1 g. I was dispersed in 4 ml. 2% carboxymethyl cellulose or compressed with 5 g. Al(OH)₃.

IT Ulcers
 (glycyrrhetic acid deriv. for treatment of
 gastric)

IT Aluminum salts
 (of 3.beta.-hydroxy-11-oxoolean-12-en-30-oic acid, for stomach ulcer
 treatment, manuf. of)

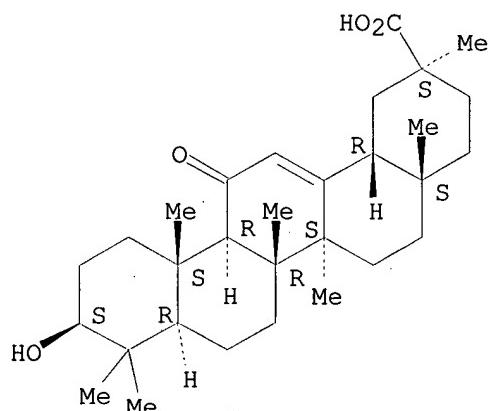
IT 4598-66-7, Olean-12-en-30-oic acid, 3.beta.-hydroxy-11-oxo-,
 aluminum salt
 (for starch ulcer treatment, manuf. of)

IT 4598-66-7, Olean-12-en-30-oic acid, 3.beta.-hydroxy-11-oxo-,
 aluminum salt
 (for starch ulcer treatment, manuf. of)

RN 4598-66-7 HCAPLUS

CN Olean-12-en-29-oic acid, 3-hydroxy-11-oxo-, aluminum salt (3:1),
 (3.beta.,20.beta.)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



1/3 Al

AN 1963:461299 HCPLUS

DN 59:61299

OREF 59:11195h,11196a

TI Compound from **glycyrrhetic acid** and vitamin B6

IN Noji, Yoshizo; Uno, Toyozo; Ito, Toshisuke

PA Maruzen Kasei Co.

SO 3 pp.

DT Patent

LA Unavailable

CC 30 (Pharmaceuticals)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 37009598 19620728 JP 19591008

AB **Glycyrrhetic acid** (I) (4.7 g.) and 1.7 g. vitamin B6 free base in 100 cc. 99% EtOH were heated at 60.degree. for about 30 min., dissolved, and EtOH distd. at 55.degree. and 10-15 mm. to give a yellow powder, m. 130.degree., **insol.** in H₂O and sol. in EtOH, acetone, and glycerol. The equiv. mol. compd. of I and II was detd. by x-ray diffraction.IT Pyridoxol, esters with 3. β -hydroxy-11-oxoolean-12-en-30-oic acidIT 3390-81-6, Olean-12-en-30-oic acid, 3. β -hydroxy-11-oxo-, compd. with pyridoxol (1:1)
(prepn. of)

L105 ANSWER 114 OF 114 HCPLUS COPYRIGHT 2003 ACS

AN 1928:19042 HCPLUS

DN 22:19042

OREF 22:2240b-c

TI Note on **licorice**

AU Sage, C. E.

SO Chemist and Druggist (1927), 107, 340-1

DT Journal

LA Unavailable

CC 17 (Pharmaceutical Chemistry)

AB Analyses of 21 com. samples of block **licorice** showed loss on drying at 100.degree. 9.4-17.5%, sol. in cold H₂O 56.5-81.4%, **insol.** in cold H₂O 7.1-28.0%, ash 4.6-12.1%, **glycyrrhizin** 6.0-14.4%, insol. in 90% cold EtOH 20.0-53.8%, total sugar before inversion 4.5-32%, after inversion 8.4-45.4%. Analyses of 15 com. samples of stick **licorice** gave loss on drying at 100.degree. 7.0-15.5%, sol. in cold H₂O 58.0-80.4%, **insol.** in cold H₂O 8.6-31.0%, ash 3.9-7.7%, **glycyrrhizin** 6.6-14.6%. **Licorice** differs much according to its source and method of manuf.; **glycyrrhizin** dets. its flavor; a high % of sugar might indicate sophistication.

>> fil wpix

FILE 'WPIX' ENTERED AT 10:23:27 ON 11 MAY 2003

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FILE LAST UPDATED: 5 MAY 2003 <20030505/UP>

MOST RECENT DERWENT UPDATE: 200329 <200329/DW>

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L106 ANSWER 1 OF 3 WPIX (C) 2003 THOMSON DERWENT
AN 1996-329424 [33] WPIX
DNC C1996-104342
TI Antibacterial composition pref. for oral use - consists of lysine its deriv, antibacterial cpd. and nonionic or amphoteric surfactant.
DC B05 D21 E16
PA (SUNZ) SUNSTAR CHEM IND CO LTD
CYC 1
PI JP 08151325 A 19960611 (199633)* 5p A61K031-195 <--
ADT JP 08151325 A JP 1994-319154 19941128
PRAI JP 1994-319154 19941128
IC ICM A61K031-195
ICS A61K007-16; A61K007-18; A61K007-22; A61K007-26; A61K031-05;
A61K031-085; A61K031-14; A61K031-44; A61K031-77; A61K033-16;
A61K033-24; A61K035-64; A61K035-78
AB JP 08151325 A UPAB: 19960823
Compsn. pref. for oral use consists of lysine or its deriv. cpd. showing antibacterial activity and at least one of nonionic surfactant or amphoteric surfactant

Pref. nonionic surfactant is a polyoxyethylene oxide-polypropylene oxide block-copolymer or sucrose fatty acid ester; the compound showing antibacterial activity is cationic antibacterial agent esp. cetyl pyridinium chloride or benzalkonium chloride, fluoride esp. sodium fluoride or tin fluoride, naturally occurring antibacterial substance esp. thymol, oil-soluble licorice extract, propolis, camomile, polyphenol, mulberry bark extract, aloe extract or teas extract or trichlosan or isopropylmethylphenol.

USE/ADVANTAGE - The compsn. has good antibacterial activity against bacterial aggregate or mycelial granule e.g. biofilm or plaque. The compsn. is not affected.

EXAMPLE - Staphylococcus aureus ATCC 6538 strain was cultured in 100 ml Trypticase soy broth (TSB) at 37 deg.C for 24 hr., washed with centrifugation (7000 rpm, 5 min.), suspended on distilled water, and the suspension (10 ml) was placed on membrane filter (10 mm dia. 0.45 micro pore size) with suction to give a mycelial aggregate model. The model was immersed in cetyl pyridinium chloride (CPC) soln., soln. of cetyl pyridinium chloride and arginine (LYS) or 'PLULONIC' (RTM) (PLU)-added ARG, followed by determin. of growth rate after cultivation in Trypticase soy agar (TSA) at 37 deg.C for 24 hr. to give following results (Sample No content by % of: CPC/LYS/PLU, growth rate by +: growth, o:partial growth and -: no growth, at reaction period by min.: 5/10/15/20/30): 1, 0.01/0/0, +/+/-/-; 2, 0.01/0.001/0.0, +/+/-/o-; 3, 0.01/0.01/0.1, +/+/-/-/-; 4, 0.01/0.1/0.1, +/+/-/-; 5, 0.01/1.0/0.1, +/+/-/-/-; 6, 0/01/0.1/1.0, +/-/-/-/-; 7, 0/0/0/1/0/1/5.0, +/-/-/-/-; 8, 0/10/0. +/+/-/+/-; and 9, 0/0/1.0, +/+/-/+/-.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-A10; B04-C03C; B05-C07; B07-A02; B07-D04; B10-A25; B10-B01B;
D08-B08; E07-A02A; E07-D04A; E10-A07; E10-A22A; E10-B01C; E10-E02D1;

E10-E02E1; E33-B; E35-H

L106 ANSWER 2 OF 3 WPIX (C) 2003 THOMSON DERWENT
 AN 1996-329423 [33] WPIX
 DNC C1996-104341
 TI Antibacterial compsn. pref., for oral use - consists of arginine or its deriv antibacterial cpd. and nonionic or amphoteric surfactant..
 DC B05 D21 E16
 PA (SUNZ) SUNSTAR CHEM IND CO LTD
 CYC 1
 PI JP 08151324 A 19960611 (199633)* 6p A61K031-195 <--
 ADT JP 08151324 A JP 1994-319152 19941128
 PRAI JP 1994-319152 19941128
 IC ICM A61K031-195
 ICS A61K007-16; A61K007-18; A61K007-26; A61K031-045; A61K031-085; A61K031-14; A61K031-155; A61K031-22; A61K031-44; A61K031-70; A61K031-77; A61K033-16; A61K033-24; A61K035-64; A61K035-78; A61K045-00
 ICI A61K031-085, A61K031:195; A61K031-155, A61K031:195, A61K031:77; A61K031:77, A61K035-
 AB JP 08151324 A UPAB: 19960823
 Compsn. pref. for oral use consists of arginine or its deriv. and compound showing antibacterial activity opt. with addition of at least one of nonionic surfactant or amphoteric surfactant. Pref. nonionic surfactant is a polyoxyethylene oxide-polypropylene oxide block-copolymer or sucrose fatty acid ester; the compound showing antibacterial activity is cationic antibacterial agent esp. cetyl pyridinium chloride or benzalkonium chloride, fluoride esp. sodium fluoride or tin fluoride, naturally occurring antibacterial substance esp. thymol, oil-soluble licorice extract, propolis, camomile, polyphenol, mulberry bark extract, aloe extract or teas extract or trichlosan or isopropylmethylphenol.
 USE/ADVANTAGE - The compsn. has good antibacterial activity against bacterial aggregate or mycelial granule e.g. biofilm or plaque. The compsn. is not affected.
 EXAMPLE - Staphylococcus aureus ATCC 6538 strain was cultured in 100 ml Trypticase soy broth (TSB) at 37 deg.C for 24 hr., washed with centrifugation (7000 rpm, 5 min.), suspended on distilled water, and the suspension (10 ml) was placed on membrane filter (10 mm dia. 0.45 micro pore size) with suction to give a mycelial aggregate model. The model was immersed in cetyl pyridinium chloride (CPC) soln., soln. of cetyl pyridinium chloride and arginine (LYS) or 'PLULONIC' (RTM) (PLU)-added ARG, followed by determin. of growth rate after cultivation in Trypticase soy agar (TSA) at 37 deg.C for 24 hr. to give following results (Sample No content by % of: CPC/LYS/PLU, growth rate by +: growth, o:partial growth and - : no growth, at reaction period by min.: 5/10/15/20/30): 1, 0.01/0/0, +/-/+/-; 2, 0.01/0.001/0.0, +/-/+/-; 3, 0.01/0.01/0.1, +/-/+/-; 4, 0.01/0.1/0.1, +/-/+/-; 5, 0.01/1.0/0.1, +/-/-/-; 6, 0/01/0.1/1.0, +/-/-/-; 7, 0/0/0.1/0.1/5.0, +/-/-/-; 8, 0/10/0, +/-/+/-; and 9, 0/0/0/1.0. +/-/+/-.

Dwg.0/0

FS CPI
 FA AB; DCN
 MC CPI: B04-A10; B04-C03C; B05-C07; B07-A02; B07-D04C; B10-A17; B14-A01; B14-N05; D08-B08; E10-A17B

L106 ANSWER 3 OF 3 WPIX (C) 2003 THOMSON DERWENT
 AN 1992-239891 [29] WPIX
 DNC C1992-107827
 TI Compsn. for mouth wash and tooth paste - contains glycyrrhiza or its oil soluble extract, for effective prevention or cure of tooth decay and periodontitis.
 DC B04 B05 D21 E15
 PA (SUNZ) SUNSTAR CHEM IND

CYC 1
 PI JP 04164021 A 19920609 (199229)* 5p A61K007-26 <--
 JP 2848688 B2 19990120 (199908) 4p A61K007-26 <--
 ADT JP 04164021 A JP 1990-289447 19901026; JP 2848688 B2 JP
1990-289447 19901026
 FDT JP 2848688 B2 Previous Publ. JP 04164021
 PRAI **JP 1990-289447 19901026**
 IC ICM A61K007-26
 AB JP 04164021 A UPAB: 19931006
 The compsn. is used as mouth wash and toothpaste. It effectively prevents or cures tooth decay and periodontitis with natural antimicrobial agent being compounded.
 0/0
 FS CPI
 FA AB; DCN
 MC CPI: B04-A07F2; B12-A01; B12-D07; B12-L03; B12-L04; D08-A; E10-E04M1;
 E31-N04D

=> d all abeq tech abex tot

L154 ANSWER 1 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN 2003-034184 [03] WPIX
 DNC C2003-008340
 TI Composition for use in oral cavity such as toothpaste, comprises non-aqueous base and sodium hydrogen carbonate.
 DC B03 B05 D21 D22
 PA (NIZE-N) NIPPON ZETTOC KK
 CYC 1
 PI JP 2002302429 A 20021018 (200303)* 8p A61K007-16 <--
 ADT JP 2002302429 A JP 2001-104161 20010403
 PRAI JP 2001-104161 20010403
 IC ICM **A61K007-16**
 ICS **A61K007-18; A61K007-24**
 AB JP2002302429 A UPAB: 20030113
 NOVELTY - A composition for oral cavity comprises a non-aqueous base and sodium hydrogen carbonate.
 USE - For use in oral cavity such as toothpaste.
 ADVANTAGE - The composition does not have any bitterness, astringency or acrid taste. The composition provides excellent foam during dispersion in the oral cavity.
 Dwg.0/0
 FS CPI
 FA AB; DCN
 MC CPI: B03-D; B04-D02; B04-L06; B05-A01B; B05-B02A3; B07-D09; B09-B;
 B10-A17; B10-C02; B10-E04B; B12-M02A; B14-C03; **B14-N06;**
 D08-A05
 TECH UPTX: 20030113
 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: The composition further contains a solid acidic component at normal temperature. The amount of sodium hydrogen carbonate in the composition is 1-50 mass%. The acidic component is selected from citric acid, succinic acid, lactic acid, aluminum, calcium lactate, adipic acid and malic acid. The composition further contains a deposit and dental calculus prevention component, fluoride, antiseptic, antiinflammatory and epsilon-amino caproic acid. The fluoride is sodium chloride, monofluorophosphate, potassium fluoride, sodium monofluorophosphate and/or tin fluoride. The antiseptic component is isopropyl methyl phenol, cetylchloride pyridinium, dequalinium chloride, benzalkonium chloride, benzethonium chloride, chlorhexidine hydrochloride, chlorhexidine gluconate, triclosan, hinokitiol, **copper** chlorophyllin sodium and lysozyme chloride. The antiinflammatory component is azulene sodium sulfonate, allantoin, allantoin chloro hydroxy aluminum, allantoin dihydroxy aluminum,

glycyrrhetic acid, glycyrrhetic acid salts, beta-glycyrrhetic acid, pyridoxine hydrochloride and/or tocopherol acetate. The deposit prevention component of dental calculus is zeolite, sodium pyrophosphate and/or sodium polyphosphate.

ABEX UPTX: 20030113

EXAMPLE - A tooth paste was prepared by mixing (in mass%) agar (5.0), glycerine (48.5), sodium hydrogen carbonate (20.0), sodium fluoride (0.2), tocopherol acetate (0.1), aluminum hydroxide (15.0), silicic acid anhydride (8.0), sodium lauryl sulfate (1.0), saccharin sodium (0.1) and ethyl paraben (0.1). The obtained toothpaste did not have any bitterness, astringency or acrid taste, provided excellent foaming strength.

L154 ANSWER 2 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN 2000-303358 [26] WPIX
 DNN N2000-226702 DNC C2000-091966
 TI Composition for administering drug or removing tartar from teeth comprises e.g. bactericide and water soluble polymer or exothermic substance.
 DC A96 B07 D21 P24 P32
 IN FUJINAKA, H; KAYANE, S; MAEDA, K; MURAKAMI, Y; SUZUKI, A; YANOU, Y; YOSHIDA, H
 PA (KAOS) KAO CORP
 CYC 23
 PI WO 2000018364 A1 20000406 (200026)* JA 21p A61K007-16 <--
 RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
 W: CN SG US
 JP 2000159648 A 20000613 (200035) 6p A61K007-16 <--
 JP 2000186023 A 20000704 (200037) 4p A61K007-16 <--
 EP 1123696 A1 20010816 (200147) EN A61K007-16 <--
 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
 CN 1319001 A 20011024 (200213) A61K007-16 <--
 US 6475470 B1 20021105 (200276) A61K007-16 <--
 ADT WO 2000018364 A1 WO 1999-JP4935 19990910; JP 2000159648 A JP 1999-217180
 19990730; JP 2000186023 A JP 1998-362263 19981221; EP 1123696 A1 EP
 1999-943267 19990910, WO 1999-JP4935 19990910; CN 1319001 A CN 1999-811206
 19990910; US 6475470 B1 WO 1999-JP4935 19990910, US 2001-787408 20010321
 FDT EP 1123696 A1 Based on WO 200018364; US 6475470 B1 Based on WO 200018364
 PRAI JP 1998-362263 19981221; JP 1998-271721 19980925
 IC ICM A61K007-16
 ICS A46B009-04; A61C017-00
 AB WO 200018364 A UPAB: 20000531
 NOVELTY - Composition comprises:
 (1) an agent having pharmaceutical activity or a bactericide acting on the periodontium and
 (2) an exothermic substance or a water soluble polymer.
 The composition has a water content of less than 5 wt.%.
 USE - The composition can be applied to the teeth and/or incorporated into toothbrushes and used to massage the gum during brushing of the teeth to remove and inhibit tartar or to treat or prevent periodontal diseases, or can be used to deliver an active agent e.g. a bactericide, antiinflammatory, hypotensive, antihistamine or agent that protects against AIDS infection to the oral cavity.
 ADVANTAGE - The composition can be absorbed by the oral mucosa and has activity in the oral cavity.
 Dwg.0/1
 FS CPI GMPI
 FA AB; DCN
 MC CPI: A12-V01; A12-V04B; B05-A01B; B07-D04A; B14-A01;
 B14-N06B; D08-A05; D08-B08
 TECH UPTX: 20000531
 TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred composition: The composition has a 'heripa' type viscosity of 300-15000 dPa.s at 25degreesC and comprises an alkaline earth metal salt.

ABEX UPTX: 20000531

ADMINISTRATION - The composition is formulated as a toiletry such as toothpaste or is incorporated into toothbrushes.

EXAMPLE - Dental cream with a 'heripa' type viscosity of 14800 dPa.s at 25degreesC comprised (in wt.%): cetylpyridinium chloride (0.01), beta-glycyrrhetic acid (0.01), triglyceride (27.85), liquid paraffin (25.93), xanthan gum (0.20), dextrin (35.00), anhydrous silica (10.00) and flavoring (1.00).

L154 ANSWER 3 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN 1999-472148 [40] WPIX
 DNN N1999-352836 DNC C1999-138700
 TI Mouthwash - used as disinfecting agent for treating oral cavity wounds.
 DC A96 B05 B07 D21 P33
 PA (KANA-N) KANAE KAGAWA KK
 CYC 1
 PI JP 11197217 A 19990727 (199940)* 9p A61J007-00 <--
 ADT JP 11197217 A JP 1998-18224 19980112
 PRAI JP 1998-18224 19980112
 IC ICM A61J007-00
 ICS A61K007-16; A61K009-00
 AB JP 11197217 A UPAB: 19991004
 NOVELTY - A mouthwash consists of a water-proof container (2) and a porous medical agent (4) holder. The porous holder (3) contains a surfactant, a moisturizer and a medical agent.

USE - Used for treating halitosis, pharyngitis, gargling agent, disinfecting agent for treating oral cavity wounds, or for treating tooth extraction wounds.

ADVANTAGE - The solubility of the medical agent is remarkably high. The medicine is stable even when stored for long period. The pocket containing medical agent are disposable, compact, easy to carry and economical.

DESCRIPTION OF DRAWING(S) - The perspective diagram shows the disposable mouthwash configured in a paper cup. (2) Water-proof container; (3) Porous holder; (4) Medical agent; (6) Water; (30) Porous pocket; (31) Strand.

Dwg.1/10

FS CPI GMPI
 FA AB; GI; DCN
 MC CPI: A10-E01; A12-V04B; B04-A10; B04-C02E; B04-C03C; B10-C04C;
 B12-M09; B14-A01; B14-N05; B14-N17; D08-A

L154 ANSWER 4 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN 1999-302017 [25] WPIX
 DNC C1999-088479
 TI Dental product for the treatment and prevention of periodontal diseases.
 DC A25 A96 B04 B05 D21 E19
 IN CUTLER, E T
 PA (SQUI-N) SQUIGLE INC
 CYC 1
 PI US 5900230 A 19990504 (199925)* 7p A61K007-16 <--
 ADT US 5900230 A US 1997-912502 19970818
 PRAI US 1997-912502 19970818
 IC ICM A61K007-16
 ICS A61K007-18; A61K009-20; A61K009-68
 AB US 5900230 A UPAB: 20011211
 NOVELTY - Dental product for the treatment and prevention of periodontal diseases comprises a poloxamer or poloxamer congener surfactant and xylitol.

DETAILED DESCRIPTION - Dental product for the treatment and prevention of periodontal diseases comprises:

(a) at least 0.01 wt. % of a poloxamer or poloxamer congener

surfactant; and

(b) at least 10 wt. % xylitol.

The dental product is free from:

(i) irritating detergents, including sodium lauryl sulfate and sodium N-lauroyl sarcosinate;

(ii) irritating flavors and essential oils, including phenol, thymol, carvacrol, and eucalyptol; and

(iii) irritating antimicrobials, including chlorhexidine, alexidine, **cetylpyridinium chloride**, benzalkonium chloride, benzethonium chloride, sanguinarine and triclosan.

ACTIVITY - Antiinflammatory; periodontal; antiplaque; antitartar.

MECHANISM OF ACTION - The product stabilizes cell membranes of the oral mucosa.

USE - The product is used to treat and prevent periodontal disease.

ADVANTAGE - The mixture of xylitol and poloxamer has synergistic activity. The product contains no irritants, encouraging improved patient compliance.

FS CPI

FA AB; DCN

MC CPI: A12-V01; **A12-V04B**; B04-C02A; B04-C03; B05-A01A; B05-A01B; B05-B02A3; B05-C05; B05-C07; B06-A01; B06-D01; B06-F01; B07-A02A; B07-A02B; B07-D03; B07-G; B10-A07; B10-B01B; B10-B02E; B10-C03; B10-C04E; B10-E04C; B10-F02; B10-J02; B12-M02A; **B14-N06**; B14-S09; **D08-A05**; E05-A; E05-B01; E06-A01; E06-D01; E06-F01; E07-A02B; E07-A02D; E07-A02H; E07-D03; E07-G; E10-A07; E10-B01C; E10-B01D; E10-B02D5; E10-C03; E10-C04H; E10-E04H; E10-E04J; E10-F02A2; E10-J02A2; E31-F05; E31-K01; E31-K07; E33-B; E34-C02; E34-D03

TECH UPTX: 19990630

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: The poloxamer consists of a block copolymer of ethylene oxide (EO) and propylene oxide (PO), having an arrangement of formula (I).

(EO)_a(PO)_b(EO)_a (I)

a and b = not more than 200.

The molecular weight (MR) of (I) is 1000-30000. Preferably the poloxamer is meroxapol, and is dispersible or soluble in water.

Alternatively the poloxamer congener is a trimethylolpropane block copolymerized with EO and the PO (or vice versa), where each of the three branches contains not more than 200 EO groups, and not more than 200 PO groups, preferably the poloxamer congener is poloxamine.

Alternatively the poloxamer congener is made by copolymerizing at least 2 alkylene oxides, selected from EO, PO or RO, where RO is any 1-10C alkylene oxide, to an alkane (sic) having 1-10 reactive substituent selected from SH, NH₂, RNH (sic), OH or X, where X is any other functional group capable of being alkylated by an alkylene oxide. The total number of copolymerized branches is at least 2.

The product may further contain an anionic polysaccharide and/or a non-ionic cellulose ether. The anionic polysaccharide is selected from alginic acid, gum arabic, carrageenan, carboxymethyl cellulose, karaya gum, pectin, gum tragacanth, and xanthan gum. The non-ionic cellulose ether is selected from methyl cellulose, ethyl cellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, and hydroxypropylmethyl cellulose.

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Product: The dental product is in a form selected from dentifrice powders, granules, disintegrable tablets, dentifrice pastes or gels, dentifrice lozenges, dentifrice gums, and mouthwashes. Preferably the product is in the form of a chewing gum containing 5-60 wt. % gum base selected from chicle and polybutenes.

The product is free from all foam suppressors, selected from polyacrylates, sulfonated polyacrylate oligomers, polydimethylsiloxanes, azacycloalkane-2,2-diphosphonic acids, synthetic polymeric carboxylates, and their congeners.

The dental product further comprises: 5-60 wt. % of polyol humectants, selected from glycerin, mannitol, polyethylene glycol and sorbitol; and

0.001-5 wt. % sweeteners selected from acesulfame, aspartame, dihydrochalcones, **glycyrrhizin** and its derivatives, raw and extracted **licorice**, saccharin, stevia and the rebaudosides, sucralose, and talin and the thaumatin.

The product may further contain: 1-60 wt. % of a mild abrasive having a hardness at most that of tooth enamel, selected from calcium carbonate, dibasic calcium phosphate, tribasic calcium phosphate, calcium pyrophosphate and hydroxyapatite; 1-60 wt. % of a strong abrasive having a hardness more than that of tooth enamel, selected from alumina, silica, titania, and fluoroapatite; 0.1-10 wt. % flavor; 1-2000 ppm by weight of a fluoride containing compound selected from sodium fluoride and sodium monofluorophosphate; 0.1-10 wt. % of a mono-, di- or polydentate acid or its salt selected from citric acid, ethylene diamine tetraacetic acid, ascorbic acid and sulfuric acid, to maintain the pH at 6-10; 0.1-10 wt. % of a preservative selected from paraben, potassium sorbate and calcium propionate; 0.1-1.0 wt. % of an antioxidant selected from ascorbic acid, alpha-tocopherol, beta-carotene, coenzyme Q10 and melatonin; 5-95 wt. % water; and 0.1-10 wt. % of a thickener selected from colloidal cellulose, hydrated silica, polyethylene glycol and polyvinylpyrrolidone.

The product may be in the form of a dentifrice tablet containing 0.1-10 wt. % of a tablet lubricant selected from calcium stearate, magnesium stearate, hydrogenated vegetable oil and beeswax.

ABEX UPTX: 19990630

EXAMPLE - A typical toothpaste formulation was prepared comprising (wt. %): Sylodent 15 (RTM; thickening silica) (9.00); Sylodent 700 (RTM; abrasive silica) (7.00); xylitol (36.00); distilled water (33.82); glycerin (6.28); Pluronic F127 (RTM; poloxamer) (4.00); Aqualon 7MF (RTM; cellulose gum) (1.40); Methocel K15M Premium (RTM; hydroxypropylmethyl cellulose) (0.50); flavor (1.00); color (0.75); sodium fluoride (0.24); and sodium hydroxide (0.01).

Patients using the above formulation reported experiencing less plaque and tartar, firmer and healthier looking gum tissue, reduced pocket depth, less bleeding on probing, greatly reduced canker sore recurrence, and significantly reduced tooth sensitivity. The toothpaste tasted so good that nearly all patients improved their oral hygiene, compared to the 20 % expected.

L154 ANSWER 5 OF 11 WPIX (C) 2003 THOMSON DERWENT

AN 1997-503694 [47] WPIX

DNC C1997-160205

TI Tooth-protective chewing gum for preventing dental caries.

DC B04 D13 D21

IN LI, W; LI, Y; LU, X

PA (JIAH-N) JIAHUA IND CO TAIYUAN CITY

CYC 1

PI CN 1123094 A 19960529 (199747)*

A23G003-30

ADT CN 1123094 A CN 1994-117729 19941114

PRAI CN 1994-117729 19941114

IC ICM A23G003-30

ICS A61K009-68; A61K035-78

AB CN 1123094 A UPAB: 19971125

The product is prepared by using **licorice** root, extract of honeysuckle, gum-base, thin malt sugar, white sugar powder, calcium glucuronate, **zinc** glucuronate, vitamin C and vitamin B1, which are uniformly mixed and processed. It has prevention and curing functions for decaying teeth. The chewing gum is long-lasting and has good effect, without toxicity and side effects.

FS CPI

FA AB

MC CPI: B04-A10; B12-M11; B14-N06; D03-E09; D08-B08

L154 ANSWER 6 OF 11 WPIX (C) 2003 THOMSON DERWENT

AN 1997-333297 [31] WPIX

DNN **N1997-276632** DNC **C1997-107014**
 TI Zinc glycyrrhizate granules.
 DC B04 P33
 IN WEI, N; YAO, D; ZHANG, F
 PA (AIRF-N) AIR FORCE GEN HOSPITAL
 CYC 1
 PI CN 1106258 A 19950809 (199731)* A61K009-16
 ADT CN 1106258 A CN 1994-100979 19940205
 PRAI CN 1994-100979 19940205
 IC ICM A61K009-16
 ICS **A61J003-02; A61K035-78**
 AB CN 1106258 A UPAB: 19970731
Licorice zinc granules for treating baby's fastidium and maldevelopment, acne and gastric and duodenal ulcers with high curative effect and less toxic side-effects contain powdered **licorice zinc** (5-10%), suspension aid (0.5-5%) and sugar (rest). The granules readily dissolve in water.
 FS CPI GMPI
 FA AB
 MC CPI: **B05-A03A; B14-E11**

L154 ANSWER 7 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN **1996-482086** [48] WPIX
 DNC **C1996-150656**
 TI Oral compsn. to prevent dental caries - contains water-soluble inorganic carbonate(s) and cationic disinfectant..
 DC A96 B05 B06 D21 E19 E37
 PA (LIOY) LION CORP
 CYC 1
 PI JP 08245353 A 19960924 (199648)* 8p A61K007-16 <--
 ADT JP 08245353 A JP 1995-70720 19950303
 PRAI JP 1995-70720 19950303
 IC ICM **A61K007-16**
 ICS A61K031-14; A61K031-155; A61K031-44
 AB JP 08245353 A UPAB: 19961202
 Oral compsn. comprises 2 to 40 wt.% of water-soluble inorganic carbonates and cationic disinfectant.
 Cationic disinfectants are **cetyl pyridinium chloride**, benzethonium chloride, benzalkonium chloride, decalinium chloride, chlorhexidine hydrochloride and chlorhexidine gluconate.
 USE/ADVANTAGE - The compsn. is used for prevention and treatment of periodontal diseases and dental caries. The compsn. eliminates dental plaque.
 In an example, a toothpaste comprised 40 % of calcium chloride, 1 % of carboxymethylcellulose, 0.3 % of carrageenan, 30 % of glycerin, 3 % of polyethylene glycol, 2 % of polyoxyethylene stearyl-ether, 0.05 % of **cetyl pyridinium chloride** 5 % of sodium hydrogen carbonate, 0.1 % of beta-glycyrrhetic acid, 0.01 % of butyl-paraben, 1 % of fragrance and distilled water (totally 100%).
 Dwg.0/0
 FS CPI
 FA AB; DCN
 MC CPI: A12-V03C1; **A12-V04B**; B04-C02A; B04-C02D; B04-C03; B05-A01B; B07-D04A; B10-A17; B10-E02; B12-M02A; **B14-N06**; **D08-A05**; **D08-B08**; E07-D04A; E10-A17B; E10-A22A; E10-A22G; E34-D02

L154 ANSWER 8 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN **1996-329425** [33] WPIX
 DNC **C1996-104343**
 TI Antimicrobial prep. for treating dental caries and stomatitis etc. - comprises histidine, antimicrobial cpd. and nonionic surfactant.

DC B03 D21 E13
 PA (SUNZ) SUNSTAR CHEM IND CO LTD
 CYC 1
 PI JP 08151326 A 19960611 (199633)* 6p A61K031-415
 ADT JP 08151326 A JP 1994-319153 19941128
 PRAI JP 1994-319153 19941128
 IC ICM A61K031-415
 ICS **A61K007-16; A61K007-26; A61K031-05; A61K031-085;**
 A61K031-155; A61K031-335; A61K031-44; A61K031-70; A61K031-77;
 A61K035-64; A61K035-78
 AB JP 08151326 A UPAB: 19960823
 Antimicrobial prepn. comprises histidine or its derivs., antimicrobial cpd. and nonionic surfactant.
 The nonionic surfactant is pref. polyethylene oxide polypropylene oxide block copolymer or sucrose fatty acid esters.
 The antimicrobial cpds. are (a) cationic antimicrobial cpds. including **cetyl pyridinium chloride** and chlorhexidine, (b) natural antimicrobial cpds. including thymol, oil-soluble **liquorice** extract, propolis, chamomile, polyphenol, mulberry white bark extract, aloe extractor tea extract or (c) trichlosan or isopropylmethylphenol.
 USE/ADVANTAGE - The antimicrobial prepn. is used for oral compsn. (claimed). The prepn. is used for prevention and treatment of dental caries, periodontal diseases, stomatitis and oral infections and for prevention of prodn. of oral malodour. The prepn. shows potent antimicrobial effects against suspension, biofilm and plaque of the microorganisms.
 In an example, disinfectant soln. comprised 5.0 wt.% chlorhexidine gluconate, 1.0 wt.% histidine, 2.0 wt.% sucrose fatty acid ester, 0.2 wt.% palm oil fatty acid amide propylbetaine, 0.5 wt.% fragrance and distilled water.
 Dwg.0/0
 FS CPI
 FA AB; DCN
 MC CPI: B04-C03C; B07-A02; B10-B02E; B14-A01; B14-N05; **B14-N06A;**
 D09-A01C; E07-A02A; E07-D04A; E07-D09B; E10-A07; E10-A17B; E10-E02E1;
 E10-E02F1

L154 ANSWER 9 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN **1995-021842** [03] WPIX
 CR 1997-235142 [21]
 DNC **C1995-010069**
 TI Microcapsule for reducing oral bacteria and preventing breath malodour - comprises shell with core compsn. of **cetyl pyridinium chloride** and/or domifen bromide, and sweetener.
 DC D21 E13
 IN PETERSON, L G; SANKER, L A; UPSON, J G
 PA (PROC) PROCTER & GAMBLE CO
 CYC 23
 PI US 5370864 A 19941206 (199503)* 4p. A61K009-50
 WO 9501156 A1 19950112 (199508) EN 13p A61K007-16 <--
 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
 W: BR CA CN JP PL RU
 ADT US 5370864 A US 1993-85222 19930629; WO 9501156 A1 WO 1994-US5955 19940526
 PRAI US 1993-85222 19930629
 REP EP 498463; FR 2355461; US 3929988; US 4158068; WO 9007882; WO 9311754
 IC ICM **A61K007-16; A61K009-50**
 ICS A61K009-16; A61K009-68
 AB US 5370864 A UPAB: 19970530
 Microcapsule comprises a shell material and a core compsn. comprising (a) a quaternary ammonium salt, esp. **cetyl pyridinium chloride** and/or domiphen bromide; and (b) a sweetener component comprising (i) acetosulfame and (ii) a second artificial sweetener

selected from aspartyl peptide esters, sulphamide sweeteners, sulphimide sweeteners, dihydrochalcone sweeteners and ammoniated **glycyrrhizins**, and their mixtures.

The wt. ratio of (i) to (ii) being in the range 1:15 to 15:1.

USE - The microcapsule reduces oral bacteria and breath odour. The capsules are placed in the mouth and retained for a period sufficient to provide the desired effect.

ADVANTAGE - The use of a specific sweetener compsn. provides increased actual and/or perceived sweetness as well as improving the sweetness perception in the oral cavity.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: D08-A; E06-A03; E10-A08; E10-A22G; E10-F02A2

L154 ANSWER 10 OF 11 WPIX (C) 2003 THOMSON DERWENT

AN 1993-322693 [41] WPIX

DNC C1993-143445

TI New compsns. contg. **glycyrrhetic acid** and phenanthridine alkaloid(s) - useful for treatment and prevention of cutaneous and oral mucous membrane inflammations.

DC B02 D21

IN OLIVERI, A; OLIVIERI, A

PA (OLIV-I) OLIVIERI A; (KEMI-N) KEMIPROGRESS SRL

CYC 14

PI EP 565495 A1 19931013 (199341)* EN 5p A61K031-485

R: AT BE CH DE ES FR GB IT LI LU NL PT

CA 2093401 A 19931011 (199402) A61K035-78

US 5425948 A 19950620 (199530) 3p A61K007-16 <--

IT 1254321 B 19950914 (199613) A61K000-00

ADT EP 565495 A1 EP 1993-830139 19930402; CA 2093401 A CA 1993-2093401 19930405; US 5425948 A US 1993-43493 19930406; IT 1254321 B IT 1992-RM270 19920410

PRAI IT 1992-RM270 19920410

REP EP 285367; EP 396232; GB 2122893; WO 9100728

IC ICM A61K000-00; A61K007-16; A61K031-485; A61K035-78

ICS A61K007-075; A61K007-26; A61K007-48; A61K009-14; A61K031-74

ICI A61K031-485, A61K031:

AB EP 565495 A UPAB: 19940103

New pharmaceutical compsns. for the treatment and prevention of cutaneous and oral microns membrane inflammations contain: (a) from 0.05 to 5% in wt. of 18 beta-glycyrrhetic and, both pure and in a phytocomplex form, (b) from 0.03 to 5% in wt. of extract of Sanguinaria contg. from 0.4 to 50% in wt. of sanguinarine alkaloid, and possibly (c) from 0.03 to 5% metallic salt.

USE/ADVANTAGE - The compsns. are useful in the treatment and prevention of periodontitis, inflammations of the oral mucous membrane, dental caries, acne, haematomas and superficial wounds. The compsns. may be in the form of collutories, toothpastes, gum pastes, dental cements, creams and unguents, lotions, powders, soaps, shampoos and medicated plasters.

Dwg. 0/0

FS CPI

FA AB; DCN

MC CPI: B04-A07F2; B09-B; B12-A07; B12-D07; B12-L03; B12-L04; D08-A02; D08-A05; D08-B08

ABEQ US 5425948 A UPAB: 19950804

Compsns. for treatment and prevention of cutaneous and oral mucous membrane inflammation comprises 0.05-5 % wt. 18beta-glycyrrhetic acid, 0.03-5% wt. ext. of sanguinaria comprising 0.4-50 % wt. sanguinarine alkaloid and 0.03-5 % wt. of a metallic salt. The 18beta-glycyrrhetic acid may be in pure state or as phytocomplex. The metal may be ZnCl₂, Zn citrate, NaF,

Na₂FPO₄ or SnF₂. Compsns. may be as collutaries, toothpastes, gum pastes, dental cements, creams and unguents, lotions, powders, soaps, shampoos and medicated plasters.

USE - Treats infections caused by a wide variety of microorganisms.

Dwg.0/0

L154 ANSWER 11 OF 11 WPIX (C) 2003 THOMSON DERWENT
 AN 1975-09550W [06] WPIX
 TI Aq. dentifrice compn contg a sweetener mixt - of sodium chloride and alkaline salts of saccharinic and glycyrrhizic acids.
 DC B05 D21 E12
 PA (VILL-N) LABORATOIRES H VILLETTTE
 CYC 1
 PI FR 2225146 A 19741213 (197506)*
 PRAI FR 1973-13243 19730412
 IC A61K007-16
 AB FR 2225146 A UPAB: 19930831
 Aq. dentifrice compsn. contains a water soluble alkaline fluoride or fluorophosphate preventing decay (I), an alkaline earth phosphate or metallic oxide abrasive (II) and additives such as thickener (III), surfactant (IV), moisture protectors (V), preservatives (VI), bleach or whitener (VII), perfumes and flavours (VIII) and antiseptic (IX) and a mixt. of Na chloride (X) and water sol. alkaline salts of saccharinic (XI) and glycyrrhizic (XII) acids as sweetener. The sweetener mixture prevents any taste of bitterness. Pref. (X) is 0.01-0.15 pts., (XI) is 0.005-0.05 pts. and (XII) is 0.035-0.30 pts. by wt. per 100 pts. total compsn. (I) may also be Fe, Cu, Ni fluoride or a fluorosilicate or fluoroborate or fluorophosphate pref. Na₂PO₃F. (II) may be Ca phosphate, silica, alumina or a powdered phenoplast or aminoplast. (III) may be starch, alginates or polyacrylates. (V) is glycerine or sorbitol. (IV) is sodium lauryl sulphate etc. (VIII) are menthol, aniseed with optical brighteners. (IX) may be quaternary ammonium salts. (VI) is a p-hydroxy benzoic acid ester. (VII) is TiO₂.
 FS CPI
 FA AB
 MC CPI: B04-A07E; B04-C03; B04-D02; B05-A01B; B05-B02C; B05-C07; B06-F01; B12-L04; D08-B08; E06-F01; E07-A02; E33-B

=> d his

(FILE 'HOME' ENTERED AT 08:59:43 ON 11 MAY 2003)
 SET COST OFF

FILE 'REGISTRY' ENTERED AT 09:00:00 ON 11 MAY 2003

E GLYCYRRHIZIC ACID/CN

L1 1 S E3
 E GLYCYRRHIZIN/CN
 L2 1 S E3
 E GLYCYRRHETINIC ACID/CN
 L3 1 S E3
 L4 2 S L1-L3
 SEL RN
 L5 243 S E1-E2/CRN
 L6 66 S L5 NOT ((PMS OR IDS OR MNS OR MXS)/CI OR COMPD OR WITH OR UNS
 L7 65 S L6 NOT COLCHI?
 L8 1 S INULIN/CN
 E CETYL PYRIDINIUM CHLORIDE/CN
 L9 1 S E3
 E ZINC/CN
 L10 1 S E3
 E ZINC CHLORIDE/CN
 L11 1 S E3

L12 32 S ZN/MF AND ION NOT ISOTOPE
 E COPPER GLUCONATE/CN
 L13 1 S E3
 L14 10 S 526-95-4/CRN AND CU/ELS
 L15 1 S L14 AND H2O
 L16 1 S L14 AND ZN/ELS
 L17 1 S L14 AND NC5/ES
 L18 32 S CU/MF AND ION NOT ISOTOPE

FILE 'HCAPLUS' ENTERED AT 09:08:11 ON 11 MAY 2003

 E SUNSTAR/PA,CS
 L19 1403 S E3-E69
 L20 1312 S L19 AND P/DT
 L21 586 S L20 AND COSMETIC#/SC, SX
 L22 274 S L20 AND (PHARMACEUT? OR PHARMACOL?)/SC, SX
 L23 744 S L21, L22
 L24 99 S L23 AND 1996/PY, PRY, AY
 E JP408151324/PN
 L25 109 S L23 AND 1992/PY, PRY, AY
 L26 80 S L23 AND 1999/PY, PRY, AY
 L27 261 S L24-L26
 L28 16 S L27 AND (LICORI? OR LIQUOR? OR ?GLYCYR? OR ?GLABRIDIN? OR ?GL
 SEL DN AN 7 8 14
 L29 3 S L28 AND E1-E9

FILE 'REGISTRY' ENTERED AT 09:15:57 ON 11 MAY 2003

 E GLABRIDINE/CN
 E GLABRIDIN/CN
 L30 1 S E3
 L31 8 S E6-E15
 L32 1 S C20H20O4/MF AND (2404.191.11 AND 46.150.18)/RID AND 4/NR
 L33 1 S L30, L32
 SEL RN
 L34 5 S E1/CRN
 L35 5 S L31 AND (SQL/FA OR UNSPECIFIED)
 L36 3 S L31 NOT L35

FILE 'HCAPLUS' ENTERED AT 09:19:28 ON 11 MAY 2003

L37 3296 S L4 OR L7 OR L33
 L38 207 S L31
 E LICORICE/CT
 L39 2055 S E3-E27
 L40 423 S E29-E66
 E E68+ALL
 L41 242 S E2
 E LICORICE/CT
 E E3+ALL
 L42 1197 S E1
 E E2+ALL
 L43 1282 S E7+NT
 E GLYCYRRHIZA/CT
 E E12+ALL
 L44 209 S E2
 L45 543 S E1/BI
 E E2+ALL
 L46 419 S E9, E8+NT
 E E7+ALL
 L47 1282 S E7+NT
 L48 3421 S E8-E10/BI
 L49 6061 S L37-L48
 L50 627 S (GLYCYRRHIZ? OR G) () GLABRA
 L51 2739 S GLYCYRRH? ACID
 L52 2215 S GLYCYRRHIZIN? OR GLABRIDIN? OR GLABRIN?

L53 7055 S L37-L52
 L54 15 S L53 AND (L8 OR INULIN)
 L55 305 S L53 AND ?SACCHARIDE?
 E POLYSACCHARIDES/CT
 E E3+ALL
 L56 641 S L53 AND E4,E5,E3+NT
 E OLIGOSACCHARIDES/CT
 E E3+ALL
 L57 2155 S L53 AND E4,E5,E3+NT
 L58 54 S L53 AND (L9 OR CPC OR (CETYLPYRIDINIUM OR CETYL PYRIDINIUM)())
 L59 0 S L53 AND L16,L17
 L60 115 S L53 AND (L10 OR L11 OR L12)
 L61 33 S L53 AND (ZNCL2 OR (ZINC OR ZN)())CHLORIDE OR (ZN OR ZINC)()SAL
 L62 261 S L53 AND (ZN OR ZINC)
 2 S L53 AND (L13 OR L15 OR L18)
 L64 133 S L53 AND (CU OR COPPER OR CUPR? OR (CU OR COPPER)())GLUCONATE)
 L65 347 S L53 AND (DENTIFRICE OR TOOTHPASTE OR TOOTH PASTE OR MOUTHWASH
 L66 141 S L53 AND (?PLAQUE? OR TARTAR OR ANTITARTAR OR ?CALCULUS? OR ?C
 L67 192 S L65,L66 AND L54-L64
 L68 101 S L67 AND 62/SC,SX
 L69 112 S L67 AND (1 OR 63)/SC,SX
 L70 166 S L68,L69
 L71 26 S L67 NOT L70
 SEL DN AN 15 17 19 20 21
 5 S E1-E15 AND L71
 L72 165 S L70 AND (PD<=20011102 OR PRD<=20011102 OR AD<=20011102)
 L73 58 S L53 AND (?GINGIV? OR ?PERIODONT? OR ?PERIDONT? OR ?PERODONT?
 L74 24 S L74 AND L54-L64
 L75 34 S L74 NOT L75
 SEL DN AN 6 8 19 24 25
 L77 29 S L76 NOT E16-E30
 L78 52 S L75,L77 AND (PD<=20011102 OR PRD<=20011102 OR AD<=20011102)
 L79 84 S L73 NOT (DENTIFRICE# OR MOUTHWASH?)/CW
 SEL DN AN 16 43 53 54 72 75 76 80 82
 L80 9 S L79 AND E31-E57
 L81 67 S L73 NOT L74-L80
 L82 64 S L81 NOT STATUS/TI
 L83 19 S L82 AND (SALTS OR SWEET BASE OR GELLAN OR WATER OR MOUTH CAVI
 L84 88 S L29,L72,L78,L80,L83
 L85 88 S L84 AND L19-L29,L37-L84
 E RUGGLES N/AU
 E RUGGLES/AU
 L86 25 S E3,E31-E38
 L87 0 S L86 AND L19-L29,L37-L85
 E INOBYS/PA,CS
 L88 4 S (L8 OR INULIN) AND (L9 OR CPC OR (CETYLPYRIDINIUM OR CETYL PY
 L89 92 S L85,L88
 L90 42 S L53 AND OIL(2A)SOLUB?
 L91 66 S L53 AND (WATER OR H2O) (2A)INSOLUB?
 L92 105 S L90,L91
 L93 60 S L92 AND EXTRACT?
 SEL DN AN 1 14-16 20 21 25 26 45 47
 L94 10 S L93 AND E1-E30
 L95 100 S L89,L94
 L96 43 S L92 NOT L93-L95
 SEL DN AN 2 4 5 12 14 17 22 23 24 30 31 33 34 39
 L97 14 S L96 AND E31-E72
 L98 114 S L95,L97 AND L19-L29,L37-L97
 SEL HIT RN

FILE 'HCAPLUS' ENTERED AT 10:21:19 ON 11 MAY 2003
SET SMARTSELECT ON
L100 SEL L98 1- RN : 685 TERMS
SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 10:21:20 ON 11 MAY 2003
L101 684 S L100
L102 9 S L101 AND ZN/ELS
L103 1 S L101 AND CU/ELS

FILE 'HCAPLUS' ENTERED AT 10:21:43 ON 11 MAY 2003
L104 80 S L102,L103,L99 AND L98
L105 114 S L98,L104

FILE 'HCAPLUS' ENTERED AT 10:22:14 ON 11 MAY 2003
SEL PN APPS L29

FILE 'WPIX' ENTERED AT 10:23:12 ON 11 MAY 2003
L106 3 S E137-E143

FILE 'WPIX' ENTERED AT 10:23:27 ON 11 MAY 2003
E INULIN/DCN
E E3+ALL
L107 234 S E2 OR 1873/DRN
L108 99 S E4
L109 634 S INULIN/BIX
L110 696 S L107-L109
E CETYLPYRIDINIUM/DCN
E CETYL PYRIDINIUM/DCN
E E4+ALL
L111 648 S E2 OR 1036/DRN
L112 57 S E4
L113 429 S E6
L114 505 S (CETYLPYRIDINIUM OR CETYL PYRIDINIUM) ()CHLORIDE/BIX
L115 886 S L111-L114
L116 0 S L110 AND L115

FILE 'MEDLINE' ENTERED AT 10:25:12 ON 11 MAY 2003
L117 7470 S L8 OR INULIN
L118 534 S L9 OR (CETYLPYRIDINIUM OR CETYL PYRIDINIUM) ()CHLORIDE
L119 0 S L117 AND L118

FILE 'EMBASE' ENTERED AT 10:25:39 ON 11 MAY 2003
L120 1 S L119

FILE 'WPIX' ENTERED AT 10:26:09 ON 11 MAY 2003
L121 4173 S L45/BIX OR L48/BIX OR L50/BIX OR L51/BIX OR L52/BIX
E GLYCYRR/DCN
E E4+ALL
L122 273 S E2 OR 1279/DRN
L123 43 S E4
L124 5 S E6
L125 17 S E12
L126 73 S E14
L127 275 S E16
L128 39 S E18
L129 52 S E20
L130 52 S E22
L131 139 S E24
L132 275 S E26
L133 139 S E28
L134 275 S E30
L135 139 S E32

L136 4321 S L121-L135
L137 119 S L136 AND (P910 OR P911 OR P912 OR P913 OR P923)/M0,M1,M2,M3,M
L138 154 S L136 AND (A12-V02B OR A12-V04B OR B12-L03 OR C12-L03 OR B14-N
L139 26 S L136 AND (A61C OR A61J)/IC, ICM, ICS, ICA, ICI
E A61K007-16/IC, ICM, ICS
E L136 AND E3-E41
E A61K007-16/IC, ICM, ICS
L140 106 S L136 AND E3-E41
E A61K007-16/ICA, ICI
L141 2 S L136 AND E3-E12
L142 217 S L137-L141
L143 14 S L110, L115 AND L142
E ZINC CHLORIDE/DCN
E E3+ALL
L144 8573 S E2 OR 1703/DRN OR (ZN OR ZINC) ()CHLORIDE/BIX OR ZNCL2/BIX
E COPPER GLUCONATE/DCN
E CUPRIC GLUCONATE/DCN
L145 97 S (CU OR COPPER OR CUPR?) ()GLUCONATE/BIX
L146 1 S L142 AND L144, L145
L147 13 S L142 AND (ZN OR ZINC OR CU OR COPPER OR CUPR?) /BIX
L148 9 S L142 AND (A429 OR A430)/M0,M1,M2,M3,M4,M5,M6
L149 4 S L142 AND (B05-A03A OR C05-A03A OR E35-C OR E05-L03 OR E05-L03
L150 0 S L142 AND (E35-A OR E05-L03B)/MC
L151 15 S L146-L149
L152 25 S L143, L151
SEL DN AN 2 8-10 12-19 25
L153 13 S L152 AND E1-E28
L154 11 S L153 NOT L106